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A DYNAMIC SYSTEM: RESTRAINTS, VIOLENCE, COMPASSION SATISFACTION, AND  
SUPERVISION

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for  
the degree of Doctor of Philosophy

By

Thomas M. Workman

August 2016



**DUQUESNE UNIVERSITY**  
**SCHOOL OF EDUCATION**  
**Department of Counseling, Psychology and Special Education**

***Dissertation***

Submitted in Partial Fulfillment of the Requirements  
For the Degree of Doctor of Philosophy (Ph.D.)

**Executive Counselor Education and Supervision Program**

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**August 6, 2016**

A Dynamic System: Restraints, Violence, Compassion Satisfaction, and Supervision

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## ABSTRACT

### A DYNAMIC SYSTEM: RESTRAINTS, VIOLENCE, COMPASSION SATISFACTION, AND SUPERVISION

By

Thomas M. Workman

August 2016

Dissertation supervised by Mathew J. Bundick, Ph.D.

This study used a survey design to determine if supervision had a moderating effect between exposure to aggression and compassion satisfaction (CS) in a sample of workers in youth residential treatment settings ( $N=137$ ). Regressions were used to determine if the items related to aggression or supervision maintained a relationship with CS. Out of the five types of aggression surveyed, only direct verbal aggression approached significance with having a negative impact on CS. All of the elements of supervision that were measured reached the level of significance with having a positive impact on CS. These items were checked for scale reliability, and four of the items were combined to create a final supervision scale. This scale had a strong significant relationship with CS. Although supervision had a positive relationship with CS, supervision did not moderate the relationship between CS and the forms of aggression surveyed. This study provides a comprehensive overview of the core concepts as they relate to

residential treatment centers for youth. Practical implications and recommendations for future research are also provided.

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## **Chapter One: Introduction**

### **Overview**

Residential facilities that provide treatment for youth with substance use or other behavioral disorders are complex environments that present many difficulties. High rates of turnover among personnel have been identified as a significant problem within these treatment settings (Baker, Fulmore, & Collins, 2008; Beidas, 2015; Ben-Dror, 1994; Connor et al., 2003; Lakin, Hill, Bruininks, Hauber, & Krantz, 1983). These high rates of attrition can cause issues with regard to maintaining a staff of competent employees to help the youth who are in need of treatment. There are a variety of factors that may contribute to these poor rates of retention, including external issues, such as challenging working conditions and internal factors, such as burnout and psychological fatigue.

With regard to working conditions, Ryan et al. (2008) found that workers who were assaulted in the course of their work were more likely to terminate employment than those who were not. Unfortunately, individuals who maintain the most contact with youth are more likely to experience assaults (Conner et al., 2003; Matz, 2013). Other variables associated with reduced turnover include positive perceptions of work, feelings of safety, and positive perceptions of supervisors (Matz, 2013), in addition to monetary incentives (Conner et al., 2013).

Unfortunately, many of the supervisors in these facilities are promoted on the basis of their work performance, as opposed to supervisory competencies, and they receive minimal supervisory training (Foster & McAdams, 1998). Often these promotions do not include an evaluation of their supervisory competencies (Foster & McAdams, 1998). Just because employees performed in a competent manner in their previous roles does not mean that they will be efficacious supervisors.

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Violence in these treatment settings is a major concern as evidenced by the following examples. In an attempted lawsuit, a female worker attempted to sue her employing facility because she was sexually assaulted by a youth in the course of her job, and the facility responded by stating that the assault was an expected daily hazard in her work (Nereim, 2001). Anecdotal comments such as these can be quite unsettling to any individual who is interested in working with youth in a residential setting. A body of literature exists that suggests that employees assaulted in their work with youth experience symptoms of trauma that could interfere with their lives and work (Bloom, 2011; Bonner et al., 2002; Cunningham et al., 2003; Mathews, 1998; Ryan et al., 2008; Wells, Minor, Angel, Matz, & Amato, 2009). In addition to symptoms of trauma, research by Newbill et al. (2010) shows that assaulted workers were more likely to demonstrate unhelpful behaviors toward youth. These unhelpful behaviors included failing to set limits, demanding tasks of the those being helped, and denying requests of the individuals in care (Newbill et al., 2010). It is plausible that these demonstrations of unhelpful behaviors from workers to youth may lead to an increase in the probability of further assaults. If the workers act in ways that are aversive to the youth, the youth is likely to become further escalated to the point of assault.

To add to the dissonance and internal conflict created in this environment, workers are frequently required to implement physical restraints to maintain safety within the environment (Mathews, 1998). Restraints add a layer of complexity where workers are required to prevent harm and interpret ambiguous situations (Bonner, Lower, Rawcliffe, & Wellman, 2002; Steckley, 2010; Steckley & Kendrick, 2008). A major conflict exists in the dynamic that workers are required to provide care for youth and maintain safety, which also requires them to place youth in physical holds to prevent harm. An example of interpreting ambiguity exists with

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the worker having to determine the threshold at which a behavior merits restraint. The vast majority of research with regard to restraints focuses on the effects on the youth and merely glances over the workers' experiences. Workers are exposed to incidents that merit attention within the literature.

Burnout is a frequent consequence of working in these environments (Auerbach, Quick, & Pegg, 2003); however, there seems to be minimal attention given to the psychological health of the worker in residential facilities. Research in other domains provides insight into the process of burnout. Social support is suggested as a protective factor against burnout (Auerbach et al., 2003; Hunsaker, Chen, Maughan, & Heaston, 2015; Lambert, Aktheimer, & Hogan, 2010). Stress within the environment is correlated with burnout symptoms (Blevins, Cullen, Frank, Sundt, & Holmes, 2006; Bowers et al., 2011; Smart et al., 2014; Thompson, Amatea, & Thompson, 2014; Wells et al., 2009). Other research shows relationships between personality types and work environments implying a goodness-of-fit model (Lundstrom, Graneheim, Eisemann, Richter, & Astrom, 2007; Salloum, Kondratm Johnco, & Olson, 2015; Van Hook & Rothenberg, 2009; Wells et al., 2015).

Compassion satisfaction (CS) is a primary concept within the current study. CS refers to the pleasure that one derives from work and from completing work in a competent manner (Stamm, 2010). CS is important because it is correlated with meaning derived from work (Stamm, 2010). Compassion fatigue (CF) refers to burnout and secondary traumatic stress (negative feelings resultant of exposure the trauma of others), and it is observed as a negative consequence of work (Stamm, 2010). Research in this domain has aimed to examine the effects of the environment on these two variables (Kapoulitsas & Corcoran, 2015; Potter et al., 2010; Ray, Wong, White, & Heapslip, 2013; Smart et al., 2014). Other research has examined

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personality variables associated with CS and CF (de Figueiredo, Yetwin, Shere, Radzik, & Iverson, 2014; Perkins & Sprang, 2013; Ray et al., 2013). Self-care and coping are also negatively related to CF and positively related to CS (Kraus, 2005; Salloum, 2015), in addition to the presence of social supports (Hunsaker et al., 2015; Kapoutlitas & Corcoran, 2015).

Clinical supervision is another concept that is included within this study to examine its relationship with CS. Clinical supervision has been identified as a critical component to social service treatment delivery (Bernard & Goodyear, 2004; Holloway & Hosford, 1983; Jordan, 2011; Loganbill, Hardy, & Delworth, 1982; Russel-Chapin & Ivey, 2004; The Center for Substance Abuse Treatment, 2009). Research has identified the positive benefits of supervision upon clinicians, which in turn, has a positive impact on those in care (Kapoulitas & Corcoran, 2015; Hunsaker et al., 2015). However, supervisors in residential treatment settings often lack extensive (and sometimes any) training in the delivery of adequate supervision, and they are often promoted on the basis of job performance, which may have a negative impact on their effectiveness in supporting supervisees (Foster & McAdams, 1998). Job performance may be related to their abilities to help youth, complete paperwork, or other responsibilities; however, they are not typically evaluated directly on their potential to be competent supervisors. This assertion is congruent with my experiences leading to the development of this study.

### **Statement of the Problem**

Residential treatment facilities are inherently complex systems comprising variegated, interconnected subsystems. The scalable nature of these systems operates at the level of the psyche of the workers, within the population of youth, among workers, and among management. Workers within these facilities are expected to maintain a helpful relationship with youth in order to promote prosocial growth and treatment. In the course of this work, these workers are

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exposed to traumatic events that may include verbal threats, physical assaults, and restraints (Conner et al., 2003; Matz, 2013). These types of traumatic events are shown to have significant negative effects upon workers (Bloom, 2011; Bonner et al., 2002, Ryan et al., 2008, Cunningham et al., 2003; Mathews, 1998; Wells, Minor, Angel, Matz, and Amato, 2009). Particularly troubling is the positive correlation of such exposures with aversive interactions with youth (Newbill et al., 2010). These aversive interactions included failing to set limits, demanding, and denying requests of the individuals in care (Newbill et al., 2010). VanderVen (2009) asserts that these aversive reactions prevent the youth from receiving the compassionate care that is integral to facilitate prosocial growth. Supervision has been shown to be a helpful factor in enhancing treatment-oriented behaviors in social service settings (Holloway & Hosford, 1983; Jordan, 2011; Loganbill, Hardy, & Delworth, 1982; Center for Substance Abuse Treatment, 2009), but unfortunately many supervisors in these settings lack adequate training (Foster & McAdams, 1998).

These assertions are reflected in my own experiences within these treatment settings. I received my first promotion to be a supervisor with a bachelor's degree and approximately one year of experience in the field. I was propelled into a position of being a senior mentor and educator, when I did not (and perhaps, absent more training and experience, *could* not) fully understand the complex workings of the treatment setting. Furthermore, I was not provided with formal and intensive training as a supervisor until I had approximately four years of experience as a supervisor. In hindsight, I can be somewhat certain that I was inadequately equipped to approach such complexity that will be discussed in the proceeding pages, and I was an active contributor to the systemic problems within residential facilities.

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### **The Purpose of the Study**

The purpose of this study was to examine the effects of exposure to violence, aggression, and restraints on compassion satisfaction among workers in residential treatment centers that serve youth. Supervision was also examined with its relationship in moderating the onset of a reduction of compassion satisfaction as a result of exposure to violence and restraints. Data was obtained through online surveys that were administered to workers who currently worked within residential treatment facilities that serve youth. Measurements included the compassion satisfaction subscale of the Professional Quality of Life Scale –fifth edition (ProQOL) (Stamm, 2010); a self-report measure that addresses the type and frequency of exposure to aggression, violence, and restraints; and another self-report questionnaire regarding the quality and frequency of supervision. These instruments allowed for the identification of the effects of restraints and violence on compassion satisfaction, and examined supervision as a moderating variable.

### **Potential Significance**

This study had the potential to contribute to the relatively small body of literature that focused on these issues within residential facilities that serve youth. A review of the literature did not reveal any studies that are similar in the exploration of the relationships among violent exposures, CS, and supervision. If significant relationships among these variables were found, administrators and supervisors within these settings could be better able to understand the effects upon workers. This point alone has various implications. Most importantly, this understanding could provide insight into factors associated with enhancing the helpful behaviors demonstrated on behalf of the worker towards the youth. These behaviors include those that model and teach prosocial behaviors. Workers are integral members of a greater system that exists to enhance the

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abilities of the youth to function within society. If these behaviors are enhanced, it is likely that the system will be able to better teach prosocial behaviors to the youth, which in turn is likely to benefit society. This study may also have implications on the general wellness of the workers. Workers would be likely to experience less stress and more satisfaction in their lives. Although turnover is not under direct investigation in this study, turnover rates have been identified as a major issue in the aforementioned studies (Baker et al., 2008; Beidas, 2015; Ben-Dror, 1994; Connor et al., 2003; Lakin et al., 1983). This study has implications for understanding the relationship between violence and the reduction of turnover.

Supervision in the domain of residential treatment for youth has received minimal attention in the literature. This study had the potential significance of allowing us to better understand the process and effects of supervision in residential treatment. If supervision was identified as a moderator of the relationships between violence and CS, further research may be conducted in order to better understand the variables associated with this effect. This relationship has the potential to stimulate further research to explore if it is the characteristics of the supervisor, the frequency of the supervision, or the content of the supervision, that creates this moderating effect. The proposed research questions include:

- 1) Is frequency of exposure to verbal aggression, physical aggression, and restraints related to compassion satisfaction for workers in youth residential treatment facilities?
- 2) Do frequency and/or quality of formal supervision moderate the relationship between frequency of exposure to verbal aggression, physical aggression, and restraints, and compassion satisfaction for workers in youth residential treatment facilities?



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### **Theoretical Foundation**

I conceptualized this study through a metaphorical lens of Dynamic Systems Theory (DST). I first gained interest in this orientation a few years ago through exposure to a theoretical paper by Karen VanderVen (2009). During this time, I was managing a residential treatment facility and implementing new programming. An experience to which I can relate in the article was that youth came into behavior modification treatment with dysfunctional behaviors that caused distress in workers. In order to control these behaviors workers implemented punishments. The intention of these punishments was to deter the youth from further demonstrating maladaptive behaviors. The paradoxical effect of these punishments was that the behaviors escalated due to the lack of coping-competence within the youth, or the behaviors changed shape and sublimated into other dysfunctional behavioral patterns (VanderVen, 2009). The escalating behaviors merited further and more severe consequences within the system of behavior modification. This dynamic was a metaphorically recursive social process in which there was a theoretically infinite iterative process where the youth-behaviors worsened, as opposed to receiving the treatment that was desperately needed.

DST, also known as Nonlinear Dynamical Systems Theory and Chaos Theory, refers to the study of how processes of complexity occur over a period of time (Ceja & Navarro, 2011). DST is rooted in traditions of physics, astronomy, and mathematics (Thelen & Smith, 1993). DST has also been widely applied to the fields of biology and psychology (Thelen & Smith, 1993). At the heart of its application to humans, DST posits that development can only be understood through understanding the complex processes of the pieces of a system that interact with each other (Thelen & Smith, 1993). Attempting to isolate a factor of the system results in the isolated factor losing context. This loss of context prevents the researcher from

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understanding the crucial transactions that occur among factors; consequently, the ability for one to understand the true nature of the system lessens. When used in its purest sense, *Dynamical Systems Theory* applies to nonlinear computer modeling through mathematical equations; however, when applied in a metaphorical sense to describe complex social systems, *Dynamic Systems Theory* is the more appropriate label for the framework (Thelen & Smith, 1993). The term Chaos describes systems that look to occur at random with entropy, but in reality occur through a complex network of nonlinear interactions of the factors of the system (Thelen & Smith, 1993). With that statement, if one looks at a system which operates *chaotically* for a long enough interval, patterns will emerge that provide evidence of a complex dynamic pattern of behaviors of the subparts.

The application of DST to the field of psychology is debated within the literature (Gelfand & Engelhart, 2012). DST focuses on non-linear systems in order to explain factors associated within that system. *Dynamical Systems Theory* is focused on computer modeling through mathematical algorithms to determine outcomes through nonlinear equations (Gelfand & Engelhart, 2012; Goldstein, 1997). Goldstein (1997) adds that DST does not deal with independent variables; instead, it attempts to describe the workings and nature of a system that has many variables, with only a few of those variables. Variables such as these are very much interdependent upon one another. Gelfand and Engelhart (2012) caution social science researchers to be unambiguous in the goals of studies, and against confusing *Dynamical Systems Theory* in its literal sense with a metaphorical framework. To be clear, this study uses *Dynamic Systems Theory* in a metaphorical sense to provide a conceptual framework, but will not reference the computer modeling associated with *Dynamical Systems Theory*.

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Goldstein (1997) contends that non-linear thinking requires the ability to think beyond how variables have causes and correlations in the traditional sense, but instead, to think of the reciprocal relationships that variables maintain in the context of the system. He further contends that change to one variable inevitably leads to changes to all variables associated with the system. I believe that science, including this study, often attempts to reduce the complexities of human systems down to a few variables that may only exist within the context of a greater system. Vallacher, Van Geert, and Nowak (2015) assert that science should avoid attempting to explain the human experience through simple cause-and-effect relationships, but science should start to understand these relationships in the contexts of the individual and the greater system. The paradox of this statement is that many scholars see DST as reductive of human nature, as it is deterministic in its truest sense (Gelfand & Engelhart, 2012). The concept of determinism does not imply total predictability, as there are many factors within the system of which we may be unaware (Gelfand & Engelhart, 2012). As researchers, we attempt to gain a greater understanding of the nature of the system. The metaphorical interpretation of this study through DST, specifically recursion and feedback loops, will allow the research to be seen through the lens of a dynamic process of changing conditions with rules, preferences, and tendencies.

With regard to the completion of cognitive tasks regarding memory, Lobina (2014) offers conditions necessary for the occurrence of recursion. This is important because DST is a theory that transcends the boundaries of different fields, as the same principles are used to describe phenomena in biology, astronomy, and physics. Lobina (2014) contends that reduction of problems into similar sub problems must be present. These smaller problems must be solvable and the solution of the sub-problems, or combination of solutions, will lead to a solution to the greater problem at hand (Lobina, 2014). This assertion entails a scalable nature of systems and

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the concepts of DST. This concept applies to the current study in that if we can better understand the reasons for any dysfunctional interactions of the workers with youth, we can then begin to work on this problem in order to better help the youth from a systemic perspective. This type of understanding will only provide insight into a few of the factors of the greater system.

**Sensitivity to initial conditions.** Chaotic and dynamic systems show extreme sensitivity to initial conditions. Very small differentiations in initial conditions have the potential to result in extremely divergent outcomes (Guastello & Liebovitch, 2009; Thelen & Smith, 1993). In a very concrete example, a double pendulum demonstrates this concept. If two identical double pendulums start at extremely similar, but somewhat different points, the resultant effect, after a few oscillations, shows greatly divergent behavioral trajectories that appear random and chaotic. This behavior is a direct result of the slight variations in initial conditions. The term *Butterfly Effect* is frequently used to describe this phenomenon (Lorenz, 1993). In its original sense, the Butterfly Effect refers to slight errors during calculations in mathematics, such as rounding decimal points, which result in significant calculation errors in the product (Lorenz, 1993). A common metaphorical explanation of the Butterfly Effect is that a butterfly flaps its wings in Brazil, and through a chain of causal events, a tornado occurs in Texas (Lorenz, 1993). This phenomenon can be observed in developmental psychology and biology. Genetic disorders that result from slight variations and chromosomal mutations eventually lead to greatly divergent results per individual and across the individual lifespan (van Geert, 2009). The same concept applies to families with whom I have worked, where twin siblings undertake two very divergent developmental trajectories where one youth presents with delinquency and the other with great prosocial success.

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**Recursion and feedback loops.** A significant component of DST is that of the feedback loop, otherwise known as recursion. A feedback loop refers to the concept of information that is an output from a system being fed back into the system as a new input through a nonlinear relationship (van Geert, 2009; Gelfand & Engelhart, 2012). This cyclical process potentially results in an infinitely iterative process where the system continues to build off the previously existing conditions of the system (Gelfand & Engelhart, 2012). Complex systems have the ability to evolve over time without exertions of outside influences that elicit evolution (Vallacher, van Geert, & Nowak, 2015). This development is resultant of the interaction of the subparts of the greater system that create a developmental trajectory due to a complex series of transactions and interactions through feedback loops. As one variable effects the others, it results in changes to the very nature of the system itself.

This process is evidenced in treatment settings through the work of VanderVen (1994) where linear thinking re-traumatizes children in treatment settings. In this work, VanderVen (1994) asserts that a zero-tolerance policy on touching has been initiated in order to prevent children from being re-traumatized by a worker's touching. Fundamentally, at the core of a developing child, touch and attachment are basic needs that are necessary for proper development (VanderVen, 1994). She goes on to state that the policy to prevent re-traumatization has caused a situation where children are deprived of contact and interaction that is of developmental necessity, hence children continue to demonstrate escalating dysfunction which increases the frequency at which they are placed in environments that disallow touching. A similar assertion is made for punitive actions where children are not taken to appropriate stimulating activities because of consequences or failure to obtain points within behavior modification systems. The deprivation of stimuli that is necessary for adaptive social growth

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leads to unintended consequences where the child acts out due to lacking such exposure. The paradoxical outcomes of these interventions are consequence of feedback loops and dynamic processes (VanderVen, 1994).

Recursion has been used in social psychology to develop theories of multiple killings. Scheff (2011) proposes that intrinsically recursive processes are at the heart of the development of pathological behaviors such as serial murdering. In Scheff's model, he briefly describes the proposition that unacknowledged anger, shame, and alienation in the context of society results in a feedback loop that exacerbates anger, shame, and alienation. After a series of recursive processes the shame and alienation intensify to the extent where the individual achieves separation from the society and acts with antisocial tendencies towards the society. The spiral results in a sense that the individual's safety is in jeopardy. Once a mental or behavioral event is generated, a sequence of subsequent events is generated that results in a pattern (Scheff, 2011).

Ellis (1995) provides an inadvertent example of this phenomenon by the assertion that a person who has unchallenged irrational beliefs then has inappropriate emotions that serve as the activating events for future irrational belief systems and emotional responses. This cyclical pattern of an intrinsically recursive process may theoretically persist throughout the lifespan until new factors are introduced into the system. Within this cyclical process, the individual's internal system continues to evolve over time without external influence.

**Attractor.** An attractor is a state at which a system prefers to operate resultant of the interactions of the factors of the system (Guastello & Liebovitch, 2009). VanderVen (1995) discussed the state of behavior modification programming in residential facilities, describing the use of points and levels to motivate behavior. She hypothesizes that the points and level systems are actually counterproductive to the treatment of the child. VanderVen (2009) continued

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working on her previous work (VanderVen, 1995) by stating that the points and levels become the main attractor within the system. They become so strong of a force that the language of the workers, youth, and the overall culture, gravitate towards the points and levels. Predictably, this dynamic process decreases the importance of relationships with genuine roots to encourage growth from worker to youth (VanderVen, 2009). The focus becomes the points and levels system, and not the relationships that exist within the system. She contends that treatment exists within those relationships.

VanderVen's (2009) concept of the attractor is a bit divergent from the typical description of attractors within DST literature. The usual definition is that an attractor is a state at which the system shows preference for operation as consequence of the interactions of the factors of the system (Ceja & Navarro, 2011; Guastello & Liebovitch, 2009; Thelen & Smith, 1993; Vallacher, Van Geert, & Nowak, 2015). Vallacher et al. (2015) describe the attractor as a valley between two hills where factors tend to gravitate. This can be thought of as a ball that finds rest in this valley (Vallacher et al., 2015). When attractors are observed within physics, they represent a geometrical shape that is consequence of the orbits of the factors of a system, such as the orbit of electrons in an atom (Guastello & Liebovitch, 2009). Interpreting the work of VanderVen (2009) through this lens changes the view as it would be more appropriate to identify the level system as a significant factor in the system that leads to the attractor, the current state of operation that appears to be chaotic, recursive, and unproductive.

**Control parameters.** Another important concept of DST is the control parameter. Guastello and Liebovitch (2009) define control parameters as the key relationships between factors that exist within the context of the system that are amendable to outside influences (Guastello & Liebovitch, 2009). For social scientists, control parameters are targets for

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interventions. They state that if we are able to identify and intervene on the key factors within the system, we have the ability to alter the very nature of the system due to the interdependency and recursion among the factors. Considering the nature of recursive processes existing within dynamic systems, alteration of the proper control parameters has the possibility to result in an adjustment in the attractor state towards a positive trajectory and new, previously latent, attractor state (Guastello & Liebovitch, 2009).

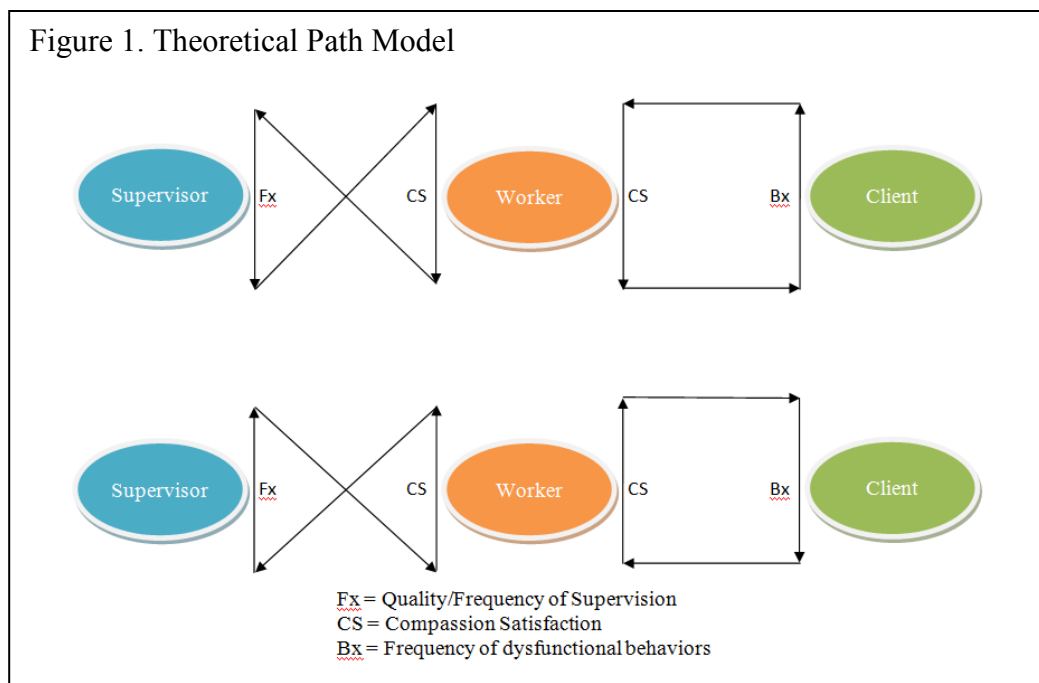
**Application to current problem.** The purpose of this study is to examine the effects of continual exposure to restraints and violence on the compassion satisfaction of workers in residential treatment facilities. Compassion satisfaction, the meaning derivative of work and the sense of completing work well (Stamm, 2010), has implications regarding how the worker responds to the youth demonstrating the problematic behavior. This information is then placed through a feedback loop in the microsystem of the worker-youth environment, which—DST would suggest—only increases the probability of the youth demonstrating behaviors that are more dysfunctional. This information is then placed through a feedback loop in the microsystem of the *youth-worker environment*, which—DST would further suggest—only increases the probability of the *worker* demonstrating behaviors that are more dysfunctional. As one can see, this dynamic has the potential to be quite the nonlinear process, as the youth and worker may remain in this counterproductive attractor.

To complicate matters, there are more factors present within the environment with which the worker interacts, such as supervisors, other workers, other youth, and we could go further to his home life or the intrinsic self to understand the complexity over inter-subsystem dynamics. These factors within the system each play an integral role in evolving the system via the interaction between the subparts through feedback loops. Research demonstrates the function of



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supervision on the meaning and satisfaction derived from similar work, in that supervision has the ability to enhance meaning derivative of work (Hunsaker et al., 2015; Kapoulitas & Corcoran, 2015). This study includes the supervisor within another feedback loop with the worker. Theoretically, the supervisor has a function in the system of affecting the compassion satisfaction of the worker, which should result in better care for youth. The link between the supervisor and worker may be a potential control parameter. A visual depiction of the theoretical path of this study is presented in Figure 1.



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### **Summary of Methodology**

This study used a survey design. Surveys were used to gather data from individuals who worked directly with youth in residential treatment. Participants were approached through email and provided with a link to the online survey. This approach was through facility management who was requested to forward emails and through the CESNET-L listserv. The survey focused on gathering data regarding non-sensitive demographic information, frequency of exposures to aggression, quality/frequency of supervision, and a questionnaire measuring compassion satisfaction. The compassion satisfaction questionnaire is a subscale of the Professional Quality of Life Inventory (Stamm, 2010). More information on the instrumentation will be presented in the following section. The data was analyzed through multiple regressions using SPSS to determine the effects of exposure to violence on compassion satisfaction, and for any moderating effects of supervision.

### **Instrumentation**

This study utilized an online survey through Qualtrics (version March, 2016) to collect data regarding the participants. The survey was administered through email, by listservs, and contacting facilities directly. The survey collected demographic variables, information regarding the frequency and quality of supervision, and levels of CS through the administration of the compassion satisfaction subscale of the ProQOL – fifth edition (Stamm 2010).

**Demographic variables.** The survey collected data regarding demographic variables from each participant. None of the information collected was of a sensitive nature. These variables included age, race, gender, level of education, type of position, years of experience working with youth, state of employment, and a screening question that asked if participants were involved in the daily routine of the youth.

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**Supervision.** The survey collected data regarding the supervision that participants received. The survey defined the parameters of supervision within the context of formal clinical supervision. All items required ranking on a Likert scale. The supervision section consisted of six items intended to assess the participants' perceptions of the frequency and quality of their interactions with their supervisors.

**Violence and restraints.** The survey included a section that asked the participants to quantify the frequency at which they were exposed to violence and restraints. They were asked to classify the frequency of such exposures on a five-point Likert scale in five domains: (a) witnessing verbal aggression from clients directed at other workers, (b) receiving direct verbal aggression from clients, (c) involvement in using physical restraints with clients, (d) witnessing clients physically assaulting other workers, and (e) being physically assaulted by clients.

**Compassion satisfaction.** The final section of the survey was composed of the CS subscale of the ProQOL – fifth edition (Stamm, 2010), which has exhibited strong psychometric properties (see Hooper, Craig, Janvrin, Wetsel, & Reimels, 2010; Stamm, 2010; Thompson et al., 2014). Stamm (2010) indicates that scores in the higher range of this scale reflect pleasure and positive feelings that are derivative of work, whereas scores in the lower range identify an individual who may find problems with work or other activities in life.

### Sample

To determine an adequate sample size that is likely to detect statistically significant effects in the current study, a power analysis was run using G-Power (Faul, Erdfelder, Buchner, & Lang, 2009). Effect sizes within the CS literature range from  $r=.24$  (Hunsaker et al., 2015) to  $r=.28$  (Ray et al., 2013). Using these effect sizes as guidelines for an anticipated effect size in the current study, along with a significance level of  $p<.05$ , the power analysis estimates a

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necessary sample size of  $N=131$ . To allow for the possibility of invalid responses, this study aspired to collect data from closer to 150 participants. In total, 178 surveys were submitted through the Qualtrics (version March, 2016). All participants needed to maintain direct contact with youth involved in residential treatment. To be a qualified candidate for participation, staff members had to currently work within this setting. Participants were sampled based on each facility's willingness to forward the email to employees and individual willingness to respond to the email.

Participants were recruited from within the United States. There was a multimodal approach to sample selection. Requests to participate were placed via email through the CESNET-L listserv. Facilities were approached through their directors. Serving youth in residential facilities and providing some level of treatment to youth with disorders were inclusion criteria for these facilities. The directors of facilities were asked to forward the link for the survey to all of their staff members.

### **Definitions of Key Terms**

**Exposure to violence.** To operationalize the concept of aggression, Cunningham, Connor, Miller, and Melloni (2003) provided: "...aggression is defined as physical assault on another, verbal threats of violence toward another, the rageful destruction of property (such as throwing or breaking objects), and/or deliberate injury to self" (p. 33). These concepts seem to be throughout the literature in terms of aggression and will be presented in the literature review. For the purposes of this study, exposure to violence included being physically assaulted, implementing physical restraints (physically holding a youth to prevent harm to self or others) to maintain safety, witnessing physical assaults on others, direct verbal aggression towards the worker, and witnessing verbal aggression towards others.

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**Compassion satisfaction.** Compassion satisfaction (CS) refers to the pleasure derived from work (Stamm, 2010). This element has been identified in research by Wells et al. (2009) that was discussed previously. Stamm (2010) specifically identifies CS as the belief that the worker makes positive contributions to the greater good, performing well, and positive feelings towards work. This concept specifically relates to providing care for youth by being able to help youth in times of need and maintaining positive beliefs regarding personal efficacy and the work setting. A person who experiences CS is likely to experience a higher level of pleasure that is directly derivative of work activities (Stamm, 2010).

**Supervision.** Supervision is a concept that has various definitions within the literature (Holloway & Hosford, 1983; Loganbill, Hardy, & Delworth, 1982; Riordan & Kern, 1994). Loganbill et al. (1982) define supervision as an “intensive, interpersonally focused, one-to-one relationship in which one person is designated to facilitate the development of therapeutic competence in the other person” (p. 4). The supervisor maintains various responsibilities, such as monitoring client welfare, facilitating the growth of the supervisee, and evaluating the supervisee’s performance (Loganbill et al., 1982). Holloway and Hosford (1983) add that clinical supervision is central to preparing the counselor to perform in a competent manner. Although some variance in defining supervision exists, most definitions agree that supervision is a *process* by which a senior member assists a lesser experienced member in gaining competencies (Bernard & Goodyear, 2004; Holloway & Hosford, 1983; Loganbill, et al., 1982; Riordan & Kern, 1994; Russell-Chapin & Ivey, 2004). The Center for Substance Abuse Treatment (2009) adds that clinical supervision during practice is the primary vehicle through which clinical skills are learned.

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### **Personal Biases**

I have a few biases that I must disclose and of which I must maintain awareness. I have several years of experience working in residential treatment facilities for youth. I have worked as a counselor, supervisor, and manager. During this time, I have had many positive and negative experiences. I have been the target of verbal aggression and physical assault on several occasions. Restraints were also part of my daily routine for a period. At different intervals during this work, I noticed that I felt a sense of burnout and a reduction of CS. These are contributing factors to my motivation to choose this topic for my dissertation. During the writing of this document, I was not employed by any residential treatment facility for youth.

### **Outline**

Chapter 1 has provided a brief overview of the primary constructs under investigation in this study. It has also provided a theoretical framework through which the primary constructs are conceptualized. Chapter 2 provides an extensive review of the literature regarding violence, restraints, Compassion satisfaction, and Supervision. Chapter 3 will include the methodology of this study. Chapter 4 will report the results. Chapter 5 will provide a discussion that examines the current findings in relation to the existing literature.

## **Chapter Two: Literature Review**

This study will focus on workers directly involved with the care of youth in residential facilities. To understand the importance of the current study, one must understand the environment of residential treatment and risks associated with in these facilities. It has been my experience—and there is much literature to support—that direct-care, therapy, and supervision of therapy in residential facilities often exposes workers to frequent crises and intense situations (Mathews, 1998). I believe that new workers tend to come into the field with grandiose dreams and are soon surprised to see the realities of the treatment setting. I myself have experienced this phenomenon and changed jobs frequently. It has been my experience—again, with much literature to support—that turnover rates are high (Baker, Fulmore, & Collins, 2008; Beidas, 2015; Ben-Dror, 1994; Connor et al., 2003; Lakin, Hill, Bruininks, Hauber, & Krantz, 1983), and turnover creates a systemic problem where treatment teams are constantly cycling through new workers (Connor et al., 2003), which compounds the chaos within the environment. This section will provide general information regarding the nature of work and environmental factors within residential facilities serving youth.

### **Understanding the Work**

**Turnover.** Baker, Fulmore, and Collins (2008) conducted a large survey of the 43 agencies operating residential facilities in the state of New York. Thirty-seven of the facilities identified staff turnover as a major barrier to providing efficacious services to youth. Several other studies have identified turnover as high within residential facilities. The rates expressed within these studies do have some variation.

Using a survey design, Matz, Wells, Minor, and Angel (2013) sampled 602 workers within residential facilities. The survey responses indicated that 88.9% of the sample intended to

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stay longer than a year in their current positions. The survey design conducted by Matz et al. (2013) was with workers across detention centers, group homes, and treatment centers. Many of these individuals lacked professional education. Lacking education can limit the ability for workers to find new employment that compensates better. The survey measured intent and did not focus on actual rates of turnover.

In contrast, Connor et al. (2003) focused on the actual rate of turnover with workers over a period of three and a half years. Out of the 395 active workers during this study, 182 chose to voluntarily terminate their employment. This accounts for 46.1% of the workforce during this time. The actual results of turnover reported by Connor et al. (2003), compared to the percentages of intent provided by Matz et al. (2013) diverge greatly.

Lakin, Hill, Bruininks, Hauber, and Krantz (1983) conducted research with direct-care workers serving mentally handicapped adults. This research used a rather large sample which included 1,202 direct-care workers. Within facilities that were publicly owned, 14% terminated their employment prior to a one-year follow up. Within facilities privately owned, 35% had terminated employment within the one-year timeframe. Six percent of the owners and primary operators of these facilities also resigned. Lakin, Bruininks, Hill, & Hauber (1982) conducted research within residential facilities serving youth. Public facilities ( $n=71$ ) ranged in rates of turnover from 2% to 157%, with an average weighted turnover rate of 29.5%. Privately operated facilities ( $n=137$ ) ranged in turnover rates from 0% to 400%, with a weighted average turnover rate of 55.4%. Multiple interesting elements exist within both of these studies. Major differences in turnover rates between publicly and privately owned facilities exist despite that the population served is similar. Specifically with the research conducted by Lakin, Bruininks, Hill, & Hauber (1982), there seems to be major differences with regard to turnover rates between



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specific facilities with ranges of 155% and 400% for public and private facilities respectively.

The individual differences between these facilities, and factors within, cannot help but to be questioned.

Ben-Dror (1994) conducted similar research and again found very high rates of turnover. Within a single organization, 50.2% of the direct-care workers voluntarily terminated their employment. Involuntarily terminated workers accounted for another 22.4% of turnover. Together, both types of attrition accounted for a combined rate of 72.6% over the course of year. Beidas et al. (2015) found turnover rates to range from 0% to 67%.

As an individual who was responsible for maintaining staffing levels in previous work, I understand the concern of such high rates of turnover. It can be difficult to maintain workers long enough to when they reach the point of competency within their roles. Connor et al. (2003) found that the highest rates of turnover existed with teachers, direct-care workers, and housekeeping staff. Ryan et al. (2008) reported that workers who were assaulted were more likely to terminate employment than those who were not. It is likely that teachers and direct-care workers are the individuals who are exposed to the highest frequencies of violence, threats, and aggression.

Minimal research was found that examined reasons for turnover. Matz et al. (2013) reports that non-custody workers and older workers had the greatest intent to stay. This point is congruent with the findings of Connor et al. (2003), who found that staff members with the most contact actually terminated their employment. Positive perceptions of jobs, positive experiences with intraorganizational communication, feelings of safety, and positive perceptions of supervision have been associated with intent to remain (Matz et al., 2013). Connor et al. (2003)

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found that a shorter commute, positive performance evaluations, monetary incentives, and salary increases maintained positive relationships with remaining in current positions.

Matz et al. (2013) referenced positive perceptions regarding the quality of supervision as a protective factor against turnover. In a large survey that included 43 agencies that operated residential facilities in the State of New York, 27.8% of the facilities provided supervision less than on a weekly basis (Baker et al., 2008). Another variable that may compound the issue created by the low frequency of supervision is the unfortunate aspect that many supervisors in residential facilities received promotions due to their positive work performance as direct-care workers, and many do not undergo formal training on the elements of, and delivering, strong supervision to workers (Foster & McAdams, 1998). Beidas et al. (2015) found that employees who left voluntarily frequently cited a lack of organizational support as a cause. Lacking supervision and turnover may occur in a cyclical fashion that creates a continually worsening problem within such facilities, indeed it may be a dynamic and nonlinear process.

### **Violence and Restraints**

“In August 2006, a worker at a branch of The Bradley Center, in Robinson [Pennsylvania], was strangled until she lost consciousness and [was] sexually assaulted by a teenage resident, according to court documents and news articles. She sued the agency. In response, lawyers for The Bradley Center wrote that “due to the nature of services provided,” the boy's actions constituted “a hazard normally expected to be present in the workplace” (Nereim, 2011, “Danger and Self-Defense,” para. 1).

“I was terrified. I’ve never been so scared in my life,” reported one staff member who was attacked by an adolescent client with a weapon (Bonner et al., 2002, p. 469). In my opinion, the physical, cognitive, and emotional hazards that come with work in residential facilities are

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obvious – society places many youth with behavioral disorders and difficulties with inhibition in a single setting in which they do everything together. What do we think will happen? Multiple studies have been conducted to determine the true effects of exposures to violence and aggression. It is apparent that the majority of the literature regarding violence and restraints within residential facilities focuses upon the effects on the clients. This literature was not included in the review, as the focus is upon the workers. It seems that qualitative approaches are the predominant methodology with regard to studying the effects of violence and restraints upon staff members. This section will provide a review of the available literature in this area of both quantitative and qualitative natures.

**Defining aggression.** To operationalize the concept of aggression, Cunningham, Connor, Miller, and Melloni (2003) provided: “...aggression is defined as physical assault on another, verbal threats of violence toward another, the rageful destruction of property (such as throwing or breaking objects), and/or deliberate injury to self” (p. 33). These concepts seem to be throughout the literature in terms of aggression, as will be evidenced in the following examples. The focal point of consequences stemming from exposures to aggression varies; however, most studies readily identify detrimental effects upon workers.

**Frequency of workers’ traumas.** Studies gauging the frequency of exposures to aggression seem to be limited. Mathews (1998) conducted research in a residential facility providing behavioral health treatment to youth. In this study, sixty-three workers completed surveys regarding their experiences of physical aggression. The frequency of exposure was quite high: 68% were physically assaulted, 89% reported a previous trauma of some type while at work, 88% reported emotional distress at work, and 28% reported being physically injured at work. Eighty-six percent of the respondents did not take any type of leave following exposure to

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trauma and returned to the milieu immediately. The frequency of workers' traumas is concerning considering the limited information that is available that identifies risk factors.

**Characteristics and risk factors.** Despite the seemingly high frequency of exposure to violence and aggression in residential facilities reported by Mathews (1998), only two articles were found that explore risk factors and characteristics of workers exposed. In general, the research does not seem to emphasize the health of workers. If agencies could identify risk factors, at-risk workers could receive more training and supervision to prevent the negative effects of violence.

Ryan et al. (2008) examined the relationship between work role and risk of exposure to violence and found that direct-care workers were at the highest risk. These results were similar to research conducted by Cunningham et al. (2003), where teachers and direct-care workers were identified at higher risks than nurses, professional treatment staff, and administrative staff. This research mirrors my own experience, where direct-care staff (as stated with work-role title), work directly with the youth and often hold them accountable to rules, deliver consequences, and simultaneously maintain the least amount of positional power. Cunningham et al. (2003) identified that workers with the highest rates of exposure to aggression were also the lowest paid. This pay gap may be due to the prerequisite education and experience of direct care workers and compensation based upon lacking credentials. Assaulted workers were more likely to be younger and have had fewer years of experience than those in positions that had less direct contact with youth (Cunningham et al., 2003). Again, this is mostly redundant upon the nature and qualifications of direct care workers. I believe that the largest concern is that the individuals who spend the most time with our youth and are expected to build helpful relationships, are the

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least trained, most underpaid, and most assaulted. How can workers be expected to continually do their jobs effectively over a period of time in these conditions?

Cunningham et al. (2003) did not explore differences between rates of assault with respect to male versus female workers nor between working with male versus female clients. They did identify that working with children, opposed to adults, was connected with a higher frequency of exposure to aggression (Cunningham et al., 2003). Workers describing that all clients had significant mental health diagnoses, as opposed to some, were more likely to be assaulted (Cunningham et al., 2003). However, the causal relationship with this point is unclear. Is it that staff members who have been assaulted seem to over generalize their clients as having mental health issues? Is it that staff members who broadly perceive mental health issues tend to interact in ways that perpetuate restraints? Finally, is it that these individuals genuinely work more frequently with individuals that have significant mental health issues? There are many factors in this dynamic system that merit exploration.

**Effects of violence and restraints.** This content area seems to provide the broadest information through the review of literature focusing on exposure to aggression. This section will provide information regarding the effects of exposure to violence and aggression on the staff members in the professional and personal domains. It is clear that more research is required to understand more fully the methods to prevent and treat exposure to aggression and violence when considering the proceeding consequences.

Research by Wells, Minor, Angel, Matz, and Amato (2009) provides information on the perception of danger and its relationship with stress within the workplace in residential facilities serving youth: the two variables displayed a positive correlation. As the workers perceived more danger in the environment, their levels of stress increased. Furthermore, as perceived threat to

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the one's own physical safety increased, the focus upon teaching coping skills and prosocial behaviors to youth, who desperately need such education, decreased. Instead, the primary focus turned to control and safety (Wells et al., 2009).

In her theoretical paper discussing the role of Dynamic Systems Theory and recursion, Karen VanderVen (2009) states that attempts to control delinquent behavior only increases the frequency of delinquency with individuals predisposed to demonstrate oppositional behavior. In other words, more effort that is placed into controlling problematic behaviors creates more problems or changes how the problems look. Education on healthy and prosocial behavior does not occur. She contends that the youth never receive the proper treatment and education for which they were sent to treatment; instead, the problems grow and change shape, which likely leads to recidivism and more violence within the workplace.

Newbill et al. (2010) noted that workers who were assaulted engaged in a higher frequency of aversive interactions with clients than those who had not been assaulted. Aversive interactions include poor limit setting, demanding, and denying client requests (Newbill et al., 2010). Such a dynamic identifies a recursive pattern that only increases the risk of further exposure to violence and assault.

Ryan et al. (2008) found that assaulted workers were more likely to experience more anxiety, somatic concerns, feelings of vulnerability, feeling a lack of control, and more impairment in performing work functions than their non-assaulted counter parts. Ryan et al. (2008) also found that assaulted individuals were also more likely than non-assaulted individuals to terminate their employment. Similarly, Bloom (2011) posits that symptoms of Acute Stress Disorder and Posttraumatic Stress Disorder (PTSD) develop in a large number of assaulted workers. Mathews (1998) mirrored this information and found that exposure to violence was

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related to PTSD symptoms at an even greater rate when workers were not debriefed following an incident. According to the DSM-V-TR (American Psychiatric Association, 2013), PTSD symptoms include intrusive memories, traumatic nightmares, dissociative reactions, prolonged distress, physiologic reactions, and negative beliefs about one's self or the world. This list of symptoms is not an all-inclusive, but it provides some context of the possible experiences of assaulted workers. It is interesting that we seem to expect workers, who are exposed to the most violence, who are the lowest paid, and least trained employees, to maintain strengths-based approaches to effectively deal with difficult behaviors when experiencing these symptoms (Cunningham et al. 2003). It is fair to hypothesize that these symptoms will have a negative relationship in terms of their compassion for the youth, when coupled with the research showing that staff members who are exposed to violence maintain a higher rate of non-therapeutic behaviors towards the youth (Newbill et al., 2010; Wells et al., 2009).

**Physical restraints.** Physical restraints create another dynamic element that complicates the role of aggression within the workplace. In my experience, many facilities have tried to avoid the use of the word restraint (preferring physical hold, therapeutic hold, or physical intervention) due to negative associations and connotations, but for the purposes of this paper the term restraint will be used. Restraint refers to the act when a worker, or group of workers, is required to hold the youth while standing, sitting, or lying, to prevent harm to self or others (Pennsylvania Department of Public Welfare, 2015). For the purposes of this paper, the definition does not include the use of handcuffs, locked doors, strapping the youth to a bed or other device, or the use of tranquilizers to maintain safety. Throughout the literature, it is obvious that there is a focus on restraint reduction, but the need for physical restraint is not denied.

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Most of the literature focusing on physical restraint is qualitative in nature. Through interviews, Steckley and Kendrick (2008) found that unanimity existed between the youth-in-care and workers regarding the necessity of restraints. Steckley (2010) received similar results and added the unanimity existed also between the beliefs that restraints were applied too forcefully and unnecessarily. It would seem logical that there is an effect on compassion fatigue and compassion satisfaction with applying restraints when such actions are possibly unnecessary or hard to interpret. These two concepts will be further developed in proceeding sections. Staff maintained a consensus that restraints were only justified to prevent harm, but drew attention to the ambiguous nature of incidents – specifically destruction of property (Steckley, 2010). I have experienced this ambiguity. I can recall a situation where a young female youth was destroying furniture in her dorm room. Her roommate was in the room with her and there were sharp pieces of wood and exposed nails covering the area. How does one discern when this incident crosses the line with regard to harm? She was not actively physically assaultive towards another being, yet was causing a dangerous situation that threatened the safety of those around her.

Workers commonly reported feelings of frustrations in their inability to help youth contain behaviors before they escalated to the extent of meriting restraint (Steckley, 2010). Steckley and Kendrick (2008) found similar results with workers feeling responsible for maintaining safety, while maintaining the individual rights of the youth including dignity and respect. Bonner, Lowe, Rawcliffe, and Wellman (2002) found that workers often voiced frustrations with regard to lines of communications with the youth, and the workers' failures to meet the needs of the youth. Steckley and Kendrick (2008) found that nearly one-third of the workers reported overwhelming feelings of guilt, doubt, or defeat following a restraint. To compound the issue, Steckley (2010) found that nearly one-third of the workers reported feeling



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unsupported by supervisors following the incident and others reported inconsistent support. Additionally, some participants in Steckly's (2010) study indicated that no debriefing took place after the incident and they believed that others did not acknowledge the effect of the incident upon them. As reported previously, debriefing has been suggested by research to be a protective factor against the development of trauma symptoms (Mathews, 1998).

As seen throughout the research stated in this section, restraints add a certain complexity to the role of the workers within residential treatment facilities. After repeated exposure to these incidents, I hypothesize that the worker may be prone to fatigue and lessened satisfaction. Much of the existing literature brings the possibility for cognitive dissonance and internal confusion while working with youth and applying restraints within this work to the forefront. Possibly the worker may begin developing hopelessness that replaces previous feelings of beneficence towards the youth. I have experienced feelings of frustration, and even anger, when it has become necessary to use physical restraints with individuals in order to maintain safety. No research was uncovered that explores the relationship between the continued provision of physical restraints and compassion satisfaction.

### **Burnout**

Burnout is not directly under investigation in this study. Burnout has been included in the review of the literature because of the existence of a connection with compassion satisfaction, which is a primary construct in this study. It is apparent that research that focuses on workers within residential treatment settings for youth is limited. For this reason, research has been included from other domains: counseling, nursing, medical care, adult corrections, and juvenile corrections. The primary focus of these areas will be to provide a review of the existing literature on burnout with professionals who work in either medical or social service

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environments in terms of symptom presentation, work-related environmental factors, and personality variables. The research is deliberately limited to environments and factors that are somewhat relatable.

**Violence.** Gascon et al. (2013) found a significant correlation between frequency of exposure to violence and presence of burnout symptoms in a sample of healthcare workers. The presentation of burnout symptoms included emotional exhaustion, depersonalization, lowered energy, and less involvement (Gason et al., 2013). Similarly, perceptions of dangers in the environment were identified as a risk factor leading to burnout with youth-residential workers by Auerbach, Quick, and Pegg (2003). Unfortunately, very few studies examine the direct effects of violence in youth residential treatment upon the workers.

**Social support.** Other research has highlighted the role of social support as a protective factor guarding against burnout. With workers in adult correctional settings, Lambert, Aktheimer, and Hogan (2010) found a negative correlation with management support and emotional exhaustion; as employees perceived greater support from individuals in management roles, scores of emotional exhaustion reduced. One element of this support from management was the availability of resources to perform job duties efficaciously (Lambert et al., 2010). Auerbach et al. (2003) had relatable results with juvenile social workers. They found that workers reported that management interrupting the workers' daily duties led to burnout (Auerbach et al., 2003). The perception of supervisors lacking sensitivity of the workers' immediate activities increased risk for burnout (Auerbach et al., 2003). Sensitivity included being aware of the social workers' current workload and not overloading workers. The same social workers also cited lacking clinical supervision as leading to feelings of burnout (Auerbach et al., 2003). Hunsaker, Chen, Maughan, and Heaston (2015) conducted research that

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demonstrates a significant inverse relationship between low management support and high levels of burnout.

Lacking confidence in supervisors and poor interactions with coworkers were identified as leading to burnout (Auerbach et al., 2003). Bowers, Nijman, Simpson, and Jones (2011) identified that workers who perform well as a team, and are well-organized, experience less burnout in an adult psychiatric setting. The assertion by Foster and McAdams (1998), that many supervisors in residential facilities are promoted based on positive job performance and lack formal supervisory training is especially applicable to this point. It is difficult for supervisors to perform in a competent manner if minimal training and direction are provided, and this limitation can have an effect on the experience of stress and burnout for the direct workers. This lack of training may influence the care for youth.

**Stress and environmental concerns.** Much of the research focuses on stressors within the environment. Wells et al. (2009) identified that the level of functioning of the work environment of a facility is directly related to stress experienced by the workers. The more functional the work environment, the less stress is experienced by the workers (Wells, et al, 2009). The work of Wells et al. (2009) relates to the research of Bowers et al. (2011), where a well-organized psychiatric ward maintained lower levels of burnout and exhaustion. Leadership affects the level of collaborative teamwork, which affects the level of organization, and inevitably influences the burnout experienced by workers; consequently, this burnout alters the attitudes of these workers towards patients in the adult psychiatric world (Bowers et al., 2011). Again, the need for well-trained and competent supervisors remains highlighted.

Smart et al. (2014) examined the intensity of the environment and the impact of this intensity upon nurses in general medical care units as compared to nurses working in critical care

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units. Nurses who worked in general medical care units were exposed to a higher frequency of different patient presentations and had significantly higher levels of burnout than nurses working in critical care units. Burnout could be resultant of the continual exposure to unanticipated events and unpredictability.

Perception of the general work environment is a recurrent theme throughout the literature. Thompson, Amatea, and Thompson (2014) found a strong inverse relationship between perception of the work environment and burnout; additionally, they found that the lower the perceptions of the quality of the environment, the higher the rates of burnout were among workers. Blevins, Cullen, Frank, Sundt, and Holmes (2006) found that 62.3% of the respondents in their study of juvenile correctional workers reported that multiple aspects about their jobs make them upset. Such findings highlight that there may be multiple factors within the dynamic system of residential treatment facilities that perpetuate the onset of burnout and the reduction of CS. Auerbach et al. (2003) found perception of the work environment was the variable most highly related to burnout compared to physical demands, danger, and supervisory support. I believe that physical demands, danger, and supervisory support contribute to the variable of perception of work environment.

Auerbach et al. (2003) identified long hours as a contributor to burnout. Similarly, Burford (1988) noted that working long hours due to crises as a contributor to burnout in direct-care workers; additionally, inconsistent instructions to conduct work, major changes in scheduling, and changes in coworkers contributed to burnout. Considering the frequent turnover reported by Connor et al. (2003), workers undergo constant exposure to attrition within the workplace at a high rate. These factors may create an environment of unpredictability and hinder the organization of the work environment. Bowers et al. (2011) previously highlighted the

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relationship between the structure of the environment and burnout. According to Bowers et al. (2011), less functionality and structure within the environment contributed to burnout.

It is common for workers within residential facilities to perceive a great deal of pressure within their roles (Blevins et al., 2006). Research conducted by Auerbach et al. (2003) found that stress scores for bureaucratic processes, specifically identified as red tape within organizations were high for juvenile correctional officers. This potential obstacle could relate to the difficulties and delays for making positive changes within these environments to enhance care and/or safety. For example, Burford (1988) found a common theme among workers experiencing stress that they believed that they had to exercise restraint when sharing their opinions during meetings due to fear of reprisal. This theme again highlights the role of managerial and supervisory support that was discussed previously.

**Personality variables.** Other research has examined the role of individual factors in contributing to the presentation of burnout symptoms. Lundstrom, Graneheim, Eisemann, Richter, and Astrom (2007) conducted research that identified individual personality factors including pessimism, worry, shyness, fatigable, irresponsible, aimless, undisciplined in behavior, and lacking control were all related to burnout symptoms in workers with youth. Salloum, Kondrat, Johnco, and Olson (2015) conducted research that shows a relationship between the practice of self-care activities and burnout; youth workers who practiced such skills showed significantly lower levels of burnout. Self-care practices included realistic goal setting, practicing self-management, and maintaining a healthy work-life balance (Salloum et al., 2015). This research suggests that there are personality types and habits that are prone to the onset of burnout. According to Lundstrom et al. (2007), individuals who are prone to pessimism and worry may be more susceptible to burnout; however, practicing the self-care strategies identified

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by Salloum et al. (2015) may be protective against burnout. This research brings to the role of the supervisor to the forefront. Supervisors may exist within a significant control parameter that may have the potential to improve the workers' performances by intervening on the factor of personality types by teaching self-care strategies.

Wells et al. (2009) examined the role of personal efficacy and its relationship to burnout, and personnel efficacy maintained an inverse relationship with the variable of stress. They found that the more that workers thought that they were able to aid youth in problem resolution, and they believed that their work was beneficial for the youth, levels of stress decreased (Wells et al., 2009). These results are mirrored in research by Van Hook and Rothenberg (2009) and Rossie et al. (2012), who found that compassion satisfaction, which partly relates to derivative meaning from work, is inversely related to levels of burnout. Compassion satisfaction will be discussed later, but it is important to connect the concepts here, as it is a key concept to this study. Individuals with a high level of commitment to their work experienced lower levels of stress in research conducted by Wells et al. (2009). Workers who were dissatisfied with their current position were prone to experience higher levels of stress (Wells et al., 2009). It is apparent that the dominant theme seems related to meaning derived from work. Individuals who believed that their work had a higher level of meaning reported less stress (Wells et al., 2009). What cannot be determined from this work is the causal factor, or the potentially intrinsic recursive nature of the relationship of these two variables (Wells et al., 2009).

**Demographic variables.** Demographic variables have also been examined for contributions that some characteristics may have to burnout and stress. However, some of the research seems to be in conflict. Education has been examined to identify any relationship with burnout. Liou (1995) studied the relationship between education and orientation towards work.

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In this work, higher levels of education were related to workers maintaining orientations towards treatment approaches, as opposed to correctional approaches. Correctional approaches were identified to be predictive of higher stress scores, while treatment approaches were found to maintain lower levels of stress and burnout (Liou, 1995). The main difference between the two approaches may be that individuals from a treatment orientation are more likely to experience the perception of beneficence and meaning within work towards the youth, while correctional approaches would experience these perceptions less. As discussed previously, feelings of helpfulness have been identified to have an inverse relationship with stress scores. This information continues to highlight the need for individuals to derive meaning from work. This factor is instrumental, as the present work seeks to identify the relationship between exposure to aggression and compassion satisfaction.

Rossie et al. (2012) found a direct positive relationship between education and burnout, and they found that individuals with higher levels of education were more likely to experience higher levels of burnout. This relationship is somewhat counterintuitive, as one might expect to find that workers with more education would be more aware of emotional work hazards and better equipped to ward off such hazards. However, the research of Rossie et al. (2012) was conducted with workers in community mental health, so the generalizability to the residential microcosm may be limited. This assertion contradicts the position of Liou (1995), who conducted research in juvenile corrections. I believe that the latter of the two would be more applicable to workers in residential treatment facilities. It can however be hypothesized that individuals with higher levels of education are exposed more frequently to incidents that cause secondary traumatic stress while conducting therapy, which could potentially lead to symptoms of burnout.

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Blevins et al. (2006) found that Caucasian workers had a tendency to have a higher level of job satisfaction than their African American counterparts. Older individuals were also reported to have higher levels of job satisfaction (Blevins et al., 2006). Auerbach et al. (2003) found that job stress was moderately higher for females when compared to males. Female workers were more likely to identify feeling a lack of support from management (Auerbach et al., 2003). In contrast, Liou (1995) found no significant relationship between age, race, or gender with regard to the experience of work stress.

There seems to be a level of disagreement within the literature regarding the role of these factors. It may be due to the variability of different factors within each worker's role including the characteristics of management, the population served, and psychologically historical individual intrinsic variables. For example, I hypothesize that an African American worker may experience less fatigue and more satisfaction if work is completed with African American youth, and the same type of relationship may be present for the Caucasian worker. It seems that many of the studies neglect the complexities of the individual and his or her experience of burnout. For example, the research regarding gender and burnout supplies conflicting information (Auerbach et al., 2003; Liou, 1995). Research regarding the role of race is also in direct conflict (Blevins et al., 2006; Liou, 1995). One cannot help but wonder about the roots and factors of these differences. Is it possible that in one study Caucasian workers were more satisfied with their work due to the racial makeup of the population served or organization? Could these factors be related to the level of meaning derived from work that has been identified as important by the research of Wells et al. (2009)? I believe that further research must be conducted to improve the acuity with regard to individual differences. Many of these themes are recurrent through the primary topic of this study – compassion satisfaction.



### **Defining Compassion Fatigue and Satisfaction**

This section provides information on the primary focus of this study: the ability for the worker to maintain positive helping attitudes towards youth. Stamm (2010) states that much of the terminology associated with this area can be quite difficult to understand because of significant overlap and evolution of terminology. She states that over the past 20 years, many terms have been introduced into the literature to explain the feelings that the worker has towards work. The introduction of these terms has resulted in the application and misapplication of a variety of terms to explain such phenomena: compassion satisfaction (CS), burnout, countertransference, compassion fatigue (CF), secondary traumatic stress (STS), and vicarious traumatization (Stamm, 2010). In order to maintain consistency with the scale used in this study, these concepts are defined in the proceeding section using the manual and research related to the Professional Quality of Life manual - second edition (Stamm, 2010).

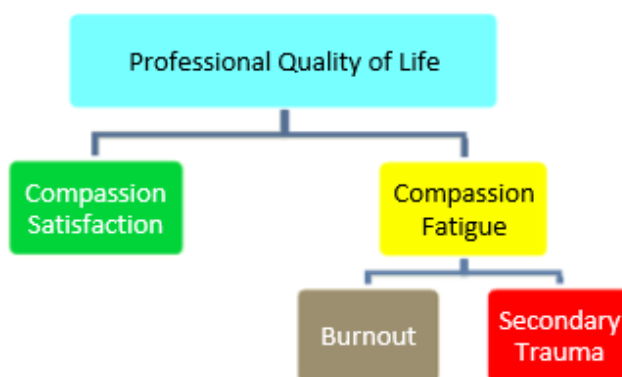
**Compassion satisfaction.** Compassion satisfaction (CS) refers to the pleasure derived from work (Stamm, 2010). This element has been identified in research by Wells et al. (2009) that was discussed previously. Stamm (2010) specifically identifies this as the belief that the worker makes positive contributions to the greater good, performing well, and positive feelings towards work. This specifically relates to providing care for youth by being able to help youth in times of need and positive beliefs regarding personal efficacy and perceptions of the work setting. A person experiencing CS is likely to experience a higher level of pleasure that is directly derivative of work activities.

**Compassion fatigue.** Stamm (2010) reports that compassion fatigue (CF) is the negative side of CS. Based upon that information; it is seen as not gaining pleasure from work and tiredness. CF breaks into two separate parts: Burnout and Secondary Traumatic Stress (STS)

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(Stamm, 2010). The burnout component of CF relates to feelings of exhaustion, frustration, anger, and depression (Stamm, 2010). This element of CF was discussed previously. The STS component of CF is a “negative feeling driven by fear and work-related trauma” (Stamm, 2010, p. 8). Work-related trauma can be a blend of both direct exposures to traumatic stimuli and indirect exposures, which includes exposures to individuals who have been exposed to stimuli (Stamm, 2010). The STS component of CF is directly related to exposures of the indirect type (Stamm, 2010). Constantly hearing traumatic stories during the course of work is an example of the indirect type. This construct is not applicable to this study, as this study focuses on the direct exposures of the workers through aggression, violence, and restraints.

Figure 2. Diagram of Professional Quality of Life



(Stamm, 2010, p. 8)

### Contributors to Fatigue and Satisfaction

**Work setting and roles.** Research has aimed to identify the protective and risk factors within certain work environments and work-related roles and duties. Potter et al. (2010) found statically significant differences in CS with regard to oncology nurses in different work settings. Nurses working in inpatient settings were more likely to have lower levels of compassion satisfaction when compared to those working in outpatient settings (Potter et al., 2010). It is

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plausible that this difference relates to the intensity of exposures. It is likely that inpatient work maintains a higher frequency of exposure to emotionally difficult situations and incidents.

Although a difference was unearthed regarding CS, no significant between group differences existed with regard to CF (Potter et al., 2010). Contrarily, research by Smart et al. (2014) found no relationship with work in critical care versus less intensive units and CS for nurses; however, such work was related to the onset of CF.

Thompson et al. (2014) examined the relationship between counselor perception of positive working conditions and CF. Having positive thoughts regarding the work environment was related to a lesser experience of CF. This is similar to the previously discussed research regarding burnout and its relationship with CF. Such results are not surprising when taking into account the role of burnout within the CF literature.

Kapoulitsas and Corcoran (2015) conducted qualitative research to determine the experience within work environments and roles that lead to the onset of CF. A common theme that arose was that of the effects of unpredictable and unknown work on a daily basis with professionals providing in-home services. “I just didn’t know what I was getting. You know, usually you are either met with hostility from the get-go, so you know you’re going to be abused at any visit...” (Kapoulitsas & Corcoran, 2015, p. 92) said one respondent. Other interviewees reported having nightmares about their clients revolving around themes of murder (Kapoulitsas & Corcoran, 2015). Such strong reactions have the potential to have a negative effect on the helping dynamic with the individual in need. It is plausible that it is difficult to experience meaning derivative of work when workers are constantly in positions to be mindful of physical safety.

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Ray, Wong, White, and Heaslip (2013) found that individuals with more direct-care contact with patients, who had mental health needs, were more likely to suffer negative symptoms with regard to CS and CF with nurses. The less hours an individual worked, the less likely the individual was apt to experience symptoms of CF (Ray et al., 2013). Research by Perkins and Sprang (2013) focused on CF and identified that interviewees believed that working with women in a substance abuse treatment setting was more difficult than working with men and contributed to the onset of CF.

**Personality and individual variables.** de Figueiredo, Yetwin, Sherer, Radzik, and Iverson (2014) examined the role of workers with histories of traumas and the relationship with CF. Across multiple types of workers, workers' histories of traumas were contributors to the onset of compassion fatigue (de Figueiredo et al., 2014). In support of this, research by Ray et al. (2013) found higher CF scores for individuals with trauma histories; however, these differences did not reach a level of significance. Individuals with histories of trauma may over empathize with clients, which in turn is a drain on the emotional wellbeing of the workers. Rossie et al. (2012) found no relationship with individual histories of trauma and CS. It is clear that there are more factors present within the system of trauma histories, CF, and CS. It is plausible that supervision and ongoing support are important factors in this relationship.

Ray et al. (2013) also found that CS was related to cynicism in an inverse manner. The higher levels of CS of the worker predicted lower amounts of cynicism (identified within burnout). CS explained 48.6% of the variance with regard to cynicism. I believe that this is an important point, if we can find the means to enhance CS, we can expect to find beliefs, attitudes, and interactions that are more helpful from worker to youth.

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In general, clinical workers verbalized an understanding regarding the exposure to client-trauma and the negative effects of reducing compassion towards youth (de Figueiredo et al., 2014). Additionally, they found that working with youth who had multiple stressors that required management in the present contributed to CF. Multiple stressors that required management in the present included family troubles, issues with housing, and other social problems (de Figueiredo et al., 2014). These variables are directly related to the concept of STS discussed by Stamm (2010). From interviews conducted by Perkins and Sprang (2013), the theme of having a family member or a personal history of addiction was a risk factor for the onset of CF with workers in a drug and alcohol setting.

In research conducted by Thompson et al. (2014), females were more likely to report CF than males. The same gender difference was evident in research conducted by Van Hook and Rothenberg (2009), where females were likely to have higher levels of CS and CF; however, these results did not reach a level of significance. Rossie et al. (2012) found no relationship between sex and CS in a community mental health setting, which directly contradicts the three previously discussed findings. There must be more factors present that differentiate the results of these studies.

Spirituality has been connected to CF as a protective factor (Thompson et al., 2014). Spirituality was defined by subjective beliefs at the level of the individual, as opposed to religiosity on the collective level (Thompson et al., 2014). Is it possible that a sense of spirituality serves as a framework through which the worker can derive meaning from work and manage emotions?

Potter et al. (2010) linked education with CS in a sample of oncology nurses. Nurses with associate's degrees had the highest likelihood of low CS scores, when compared to

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individuals with bachelor's or graduate-level education. Other research has identified no difference between CS and level of education when regressed with other variables such as psychological distress when concerning youth care workers (Rossie et al., 2012).

Research by Wagaman, Geiger, Shockley, and Segal (2015) found skills of self-other awareness and affective responses to be predictive of high levels of CS. This suggests that workers who are predisposed to demonstrate a more balanced emotional response to stimuli, and who were better tuned-in to the affect of others, were more likely to demonstrate higher levels of CS. The research in this area suggests that personal stability is an important factor in CS and CF.

**Self-care, coping, and support.** Another common theme that emerges from the literature focuses on the workers' abilities to cope and maintain healthy behaviors. Research by Kraus (2005) found a strong positive correlation between self-care and CS. Workers that consistently practiced techniques of self-care and a healthy balanced lifestyle were more likely to have more satisfaction with their work. These results are similar to those of Salloum et al. (2015), where youth workers who practiced Trauma Informed Self Care were likely to experience higher levels of CS. Rossie et al. (2012) found an inverse relationship between experiencing psychological distress and higher levels of CS. It is plausible that these studies are related in that workers who practice self-care strategies are likely to experience less psychological distress, and are likely to derive more meaning from work. It is difficult to focus on higher order functions such as meaning making, when the individual is operating at a more primitive level of safety. Research has also identified a significant inverse relationship between burnout and CS (Conrad & Kellar-Guenther, 2006; Hunsaker et al., 2015; Kraus, 2005; Rossi et al., 2012; Smart et al., 2014; Van Hook & Rothenberg, 2009). Other research has found CF significantly related to maladaptive coping; workers who demonstrated more unhealthy coping

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behaviors experienced higher levels of CF (Thompson et al., 2014). The research in this section highlights the importance for workers to maintain a level of wellness to derive meaning from work, which in turn could create more effective interactions with youth.

Kapoulitsas and Corcoran (2015) conducted qualitative research with social workers within the community. Supervision and debriefing were themes that emerged during the process. They found that workers identified frequent supervision as helpful in warding off CF and enhancing CS. Debriefing from both supervisors and peers after an incident was also identified as very important within the interviews. Importantly, supervision on its own was not enough. One particular interviewee highlighted the importance of viewing the supervisor as competent and trustworthy for the supervision to be beneficial.

Hunsaker et al. (2015) conducted quantitative research with nurses that was congruent with these results, where lower levels of managerial support were significantly predictive of higher levels of CF. Higher levels of managerial support were significantly predictive of higher levels of CS (Hunsaker et al., 2015). These results highlight the anchoring force of support and supervision in enhancing the experience of CS.

**Career stages.** Other research has sought to find a relationship among career development, CF, and CS. These cross-sectional attempts to examine CS and CF provide further insight into the dynamic relationship. Research by de Figueiredo et al. (2014) suggests that workers who are in the very early stages of career development are highly susceptible to lower CS and higher CF. Van Hook and Rothenberg (2009) found that younger workers (between ages 18 – 29) were more likely to experience low CS and higher CF. They hypothesize that this relationship is largely due to the high level of enthusiasm and idealism, coupled with the lack of experience at developing a healthy work-life balance. This evidence is supported by research

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conducted by Ray et al. (2013), where mental health professionals with less tenure were more susceptible to CF.

Contrarily, research by Potter et al. (2010) offers another perspective with oncology nurses. No significant relationship was found between years of experience with CS, CF, or burnout. Workers with between six and ten years of experience maintained the lowest scores of CS. Workers with between 11 – 20 years of experience maintained the highest risk for CF. This research is in direct conflict with the data provided by the research of de Figueiredo et al. (2014) and Ray et al. (2013), which is with different populations of workers. The applicability of the research of Potter et al. (2010) to these studies is guarded due to the different nature of the work.

### **Integrating Supervision**

Supervision is a construct that is difficult to define in the scope of this research. The vast majority of the literature focuses on professionally trained counselors, psychologists, and social workers. These professionals have a high level of training that is vastly different from that of the typical direct care worker in this study. This study will also include professional employees in residential facilities, but the main focus will be on the work of the direct care worker. It is fair to assume that the content and process of supervision with the direct care worker will differ from the professionally trained employee. Conceptually, the two classifications of workers should be expected to operate on separate levels with regard to skills and knowledge. Supervision will be defined considering research regarding professional employees, such as counselors, due to the issue that minimal research was found that discussed supervision of the direct care worker.

In a blog on the American Counseling Association's website, Barbara Jordan, counselor and counselor educator, claims that clinical supervision improves the services that are provided to clients; specifically, clinical supervision has been linked to workers' positive feelings towards



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work, lower burnout, lower turnover, and the acquisition of skills (Jordan, 2011). Interestingly, she goes on to discuss the role of supervision in mitigating countertransference (feelings towards the client) and enhancements in respecting individual differences of clients (Jordan, 2011).

These points are reflected in the research of Kapoulitas and Corcoran (2015), where the researchers highlighted the role of supervision in warding off CF and enhancing CS.

Supervision is a topic that maintains various definitions within the literature (Holloway & Hosford, 1983; Loganbill, Hardy, & Delworth, 1982; Riordan & Kern, 1994). Loganbill, Hardy, and Delworth (1982) define supervision as an “intensive, interpersonally focused, one-to-one relationship in which one person is designated to facilitate the development of therapeutic competence in the other person” (p. 4). The supervisor maintains various responsibilities such as monitoring client welfare, facilitating the growth of the supervisee, and evaluating the supervisee’s performance (Loganbill et al., 1982). Holloway and Hosford (1983) add that clinical supervision is central to preparing the counselor to perform in a competent manner. Although some variance in defining supervision exists, most definitions agree that supervision is a *process* by which a senior member assists a less experienced member in gaining competencies (Bernard & Goodyear, 2004; Holloway & Hosford, 1983; Loganbill et al., 1982; Riordan & Kern, 1994; Russell-Chapin & Ivey, 2004). The Center for Substance Abuse Treatment (2009) adds that the clinical supervision during practice is the primary vehicle through which clinical skills are learned.

Altucher (1967) defines supervision as both an intellectual and emotional experience within the clinician. Intellectual learning occurs when the worker is able to grasp fundamental concepts and tasks that are pertinent to the work at hand with a sense of pragmatism. Emotional learning, which Altucher (1967) identifies as more important, requires the clinician to experience

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discomfort when confronted with new information or difficult situations. This is evident when a clinician is required to respond to the client with minimal time to process what the client has presented. In this instance, the clinician is likely to approach the supervisor to gain comfort and support (Altucher, 1967). I believe that this dynamic is amplified with the direct-care worker. As stated previously, direct-care workers tend to have less training and are exposed to a higher frequency of ambiguous, dangerous, and fear-evoking situations. The worker is expected to respond in an effective manner despite lacking formal education and training. Altucher (1967) adds that at times, the clinician is unaware of mistakes and/or errors, and it is the supervisor's responsibility to bring these into awareness. Considering the amount of direct contact that the worker maintains in the course of a day, it is likely that the worker would benefit in a significant way from such coaching.

Supervisors are cautioned against a primary focus on the mistakes and shortcomings of the supervisee (Borders et al., 2014). As a treatment field, a shift is being made from negative to strengths-based approaches with supervisees (Borders et al., 2014). If a supervisor continually responds to the supervisee in a negative manner, the supervisee may begin responding to the client in a similar manner – defined as isomorphism (Edwards & Chen, 1999). This can also be conceptualized through the lens of DST using the theoretical path analysis presented in Chapter 1. With this point, it is imperative that the supervisor makes every effort to elicit and highlight the strengths and positive beliefs regarding the supervisee to help the supervisee replicate this dynamic to the client (Edwards & Chen, 1999). I believe that this practice applies to the residential worker in a direct manner. If the supervisor demonstrates meaning derivative of work and is supportive, patient, and empathic, the supervisee will be more likely to demonstrate the same attributes to the client. Through this recursive process, the supervisor has the potential to

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enhance the CS experienced by the worker, which could potentially increase the frequency of beneficent behaviors directed toward the youth, which increases the likelihood that the youth will acquire functional behaviors. The supervisor may serve as a vital control parameter. This assertion is supported by the research by Lanning (2005), wherein individuals reported expecting to attain a worker-client relationship that is similar to the worker-supervisor relationship. This provides framework for the application of the principles of DST to the residential treatment system.

Supervision may take place in either group and/or individual formats. Group supervision occurs when a single supervisor meets with a group of workers to provide oversight. Individual supervision occurs on a one-on-one basis, where the supervisor individually meets with the supervisee. Upon review of research, Holloway and Hosford (1983) reported inconsistencies with the effectiveness of both approaches. Lanning (2005) supports these findings through a study that supervisor-related factors (i.e., sex, theoretical orientation, experience, etc.) were more predictive of a positive supervisor-worker relationship than either group or individual supervision. Adding to this, supervision can be conducted through either directive or non-directive methods (Birk, 1972; Malikiosi-Loizos, Gold, Mehnert, & Work, 1981). Research suggests that directive approaches to supervision are helpful for less experienced workers in gaining skills, but no difference exists between the two approaches with regard to the development of empathic understanding (Birk, 1972). Research by Malikiosi-Loizos et al. (1981) adds that directive approaches are most effective when the worker maintains a different cognitive structure and level of complexity than that of the supervisor and for individuals with a lower level of cognitive complexity.

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In one of the few articles solely focusing on the role of the supervisor in residential facilities, Byrne and Sias (2010) explain the application of specific roles to help direct-care workers within Bernard's Discrimination Model. These workers tend to have the most contact with youth and may be able to provide a great deal of insight when conducting conceptualization (Byrne & Sias, 2010). This should be harnessed by the supervisor and agency in order to better help the youth. Such workers have a high frequency of direct contact with the youth, so they would benefit from live observations to enhance skill building (Byrne & Sias, 2010). The emotional reactions of these workers in response to the youth may be a result of personalization and be a focus of the supervision (Byrne & Sias, 2010). I believe that supervision could focus on mitigating these counterproductive emotional reactions in order to end the recursive cycle from worsening the youth behaviors of concern. Furthermore, a worker of lesser experience may be confused when presented with a youth who has significant mental health diagnoses and may benefit from education in these diagnoses and causes (Byrne & Sias, 2010). This type of education can lead to an understanding of the symptoms at hand which could potentially help the worker make meaning of work.

I believe that such an approach would be helpful in reducing stress during work; specifically, by limiting the reduction of CS when the worker realizes the individual with the diagnosis maintains a certain presentation and this is often unrelated to the worker. Such education would prevent the worker from feeling less efficacious in the course of work, which could result in high levels of CS, and more behaviors of beneficence towards the youth. This would continue to increase the probability of the youth acquiring more prosocial behaviors. The research of Byrne and Sias (2010) is helpful in understanding the role of supervision in the acquisition of tools and conceptual ability of the worker. This article particularly provided a

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perspective into the process of supervision in residential facilities; however, the article was theoretical in nature and did not apply scientific methodologies.

Foster and McAdams (1998) designed a training program specifically for supervisors in residential facilities serving youth. The aim of the training program was to enhance the cognitive complexity of the supervisors. The primary objectives of the training sessions were to promote moral reasoning, building relationships with supervisees, and to provide education regarding models of supervision. Novice supervisors with less than one year of experience participated in the training program. Overall, participants increased in moral reasoning skills. Participants reported the benefit of having a similar language regarding supervision, clear goals for supervision, and working models. One theme dealt with having new meaning derivative of work (Foster & McAdams, 1998). This comment is instrumental to the thought behind the current study. CS is related to the meaning derived from work, this one training program reportedly helped participants feel rejuvenated and derive more meaning from their work (Stamm, 2010). Plausibly, if supervision was given this much attention in the realm of youth residential treatment, the need for supervision with professionals working with individuals at later developmental stages would be less necessary. This statement only refers to the assertion that recursion would occur with the youth in treatment, and this new trajectory for the youth would lessen the need for services later in life. This assertion could be taken out of context, but it simply refers to the element of breaking the problem into smaller more manageable segments asserted by Lobina (2014), as these maladaptive behavioral patterns continue to grow throughout the lifespan.

The Center for Substance Abuse Treatment (2009) provides strong statements regarding the importance of supervision within organizations. The top priority of clinical supervision is to

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ensure quality service delivery and to protect the welfare of the client. “Supervision is the right of all employees and has a direct impact on workforce development and staff and client retention” (Center for Substance Abuse Treatment, 2009, p. 4). In addition, the supervisor has legal and ethical responsibilities to assure quality care for the client and professional growth for the counselor (Center for Substance Abuse Treatment, 2009).

Masters (1992) adds to the realm of making meaning from interactions during the supervisory process through the proposed intervention of Positive Reframing. He proposed that the supervisor should provide an opposing positive view to negative assertions by the supervisee. This intervention will allow the supervisee to re-examine belief systems through a paradoxical sense of dissonance. This different perspective will challenge the supervisee’s meaning of the current situation and have the potential for achievement of a higher level of cognitive complexity (Masters, 1992).

### **Focus of the study**

For the purposes of clarity, focus, and precision, this study will focus primarily on the construct of compassion satisfaction, the pleasure that one derives from work and the sense of satisfaction associated with completing work well. This will allow the research to provide a positive and strengths-based perspective upon how CS can be affected by the continual exposure to aggression, violence, and restraints; and the effects of supervision on this phenomenon. The following chapters will provide the methodology, results, and discussion.

### **Chapter Three: Methodology**

The purpose of this study was to examine the effects of exposure to violence and restraints on compassion satisfaction (CS) among workers in residential treatment centers that serve youth. Supervision was also examined within this relationship to determine if any moderating effect existed between the possible reduction of CS and exposure to aggression and restraints. Data was obtained through online surveys administered to workers who worked within residential treatment facilities serving youth. Measurements included the CS subscale of the Professional Quality of Life Scale- fifth edition (ProQOL), which is a self-report inventory (Stamm, 2010), a self-report that addresses the frequency of exposure to aggression and restraints, and a self-report regarding the quality and frequency of supervision. These instruments allowed for the identification of the effects of restraints and violence on CS, and examine supervision as a moderating variable.

#### **Research Questions**

This study had two research questions:

- 1) Is frequency of exposure to verbal aggression, physical aggression, and restraints related to compassion satisfaction for workers in youth residential treatment facilities?
- 2) Do frequency and/or quality of formal supervision moderate the relationship between frequency of exposure to verbal aggression, physical aggression, and restraints, and compassion satisfaction for workers in youth residential treatment facilities?

#### **Hypotheses**

The following were the alternative hypotheses under investigation:

H1: The frequency of exposure to verbal aggression, physical aggression, and restraints will be inversely related with compassion satisfaction.

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H2: The frequency and perception of the quality of supervision will moderate the effects of exposure to verbal aggression, physical aggression, and restraints and the inverse relationship with compassion satisfaction.

### **Research Design**

This research study used self-report survey instruments in order to gather data from individuals who worked directly with youth in residential treatment. Participants were approached through email and provided with a link to the online survey. Potential participants were approached through facility management who was requested to forward emails and through the CESNET-L listserv. The survey focused on gathering data regarding non-sensitive demographic information, frequency of exposures to various types of aggression, quality/frequency of supervision, and a questionnaire measuring CS. SPSS (version 23) was used to conduct regressions to determine the effects of exposure to violence on CS and to measure any moderating effects of supervision. More information regarding the sample size and characteristics will follow.

### **Sample**

To determine an adequate sample size that is likely to detect statistically significant effects in the current study, a power analysis was run using G-Power (Faul, Erdfelder, Buchner, & Lang, 2009). Effect sizes within the CS literature range from  $r=.24$  (Hunsaker et al., 2015) to  $r=.28$  (Ray et al., 2013). Using these effect sizes as guidelines for an anticipated effect size in the current study, along with a significance level of  $p<.05$ , the power analysis estimated a necessary sample size of  $N=131$ . To allow for the possibility of invalid responses, this study aspired to collect data from closer to 150 participants. In total, 178 surveys were submitted. All participants needed to maintain direct contact with youth involved in residential treatment.



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To be a qualified candidate for participation, staff members had to be within this setting at the time of data collection. Participants were sampled based on each facility's willingness to forward the email to employees and individual willingness to respond to the email.

Participants were recruited from within the United States. There was a multimodal approach to sample selection. Requests to participate were placed via email through the CESNET-L listserv. Facilities were approached through their directors. Serving youth in residential facilities and providing some level of treatment to youth with behavioral disorders were both inclusion criteria for these facilities. The directors were asked to forward the link for the survey to all of their staff members.

### **Collection of Data & Method of Analysis**

Data collection occurred through an online survey using Qualtrics (version March, 2016). Participation was incentivized through the use of a lottery for gift cards upon completion of the data collection. Two gift cards were drawn at random, each for \$100. An early entry drawing occurred one month after the start date of the survey, and the final drawing occurred after closing the survey. Data was stored on the primary investigators password-protected personal computer. Data was analyzed through SPSS using regressions and PROCESS for SPSS (Hayes, 2016) for a moderation model. The goal of the data analysis was to identify if a relationship exists between exposures to violence and CS; furthermore, supervision was examined as a moderating variable. All data will be destroyed within five years of publication.

### **Instrumentation**

This study utilized an online survey through Qualtrics (version March, 2016) to collect data regarding the participants. The survey was administered through email by list serves and contacting facilities directly. The survey collected demographic variables, information regarding

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the frequency and quality of supervision, and levels of CS through the administration of the compassion satisfaction subscale of the ProQOL – fifth edition (Stamm 2010).

**Demographic variables.** The survey collected data regarding demographic variables from each participant. None of the information collected was of a sensitive nature. These variables included age, race, gender, level of education, type of position, years of experience working with youth, state of employment, and a screening question that asked if participants were involved in the daily routine of the youth.

**Supervision.** The survey collected data regarding the supervision that participants received. The survey defined the parameters of supervision within the context of formal clinical supervision. All items required ranking on a Likert scale. The supervision section consisted of six items:

- 1) I meet with my supervisor for formal supervision (frequency):
- 2) I receive debriefing from my supervisor after exposure to physical violence and restraints (frequency):
- 3) My supervisor provides me with support.
- 4) My supervisor helps me learn new skills to enhance my work with clients.
- 5) My supervisor helps me better understand the clients with whom I work.
- 6) My supervisor helps me deal with my emotions related to my work.

**Violence and restraints.** The survey included a section that asked the participants to quantify the frequency at which they are exposed to violence and restraints. They were asked to classify the frequency of such exposures on a five-point Likert scale in multiple domains:

- 1) I witness verbal aggression from clients that is directed at other workers:
- 2) I receive direct verbal aggression from clients:

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- 3) I am involved in using physical restraints with clients:
- 4) I witness clients physically assaulting other workers:
- 5) I am physically assaulted by clients:

**Compassion satisfaction measure.** The final portion of the survey asked the participants to complete the Compassion satisfaction sub scale of the Professional Quality of Life Scale (ProQOL – 5<sup>th</sup> ed.) (Stamm, 2010). This scale is available for use and copying at no charge, pending that the individual using the scales provides credit to the author (ProQOL.org, 2015). Stamm (2010) reports that the ProQOL has been used in over 500 papers, which includes more than 200 peer-reviewed studies and 130 dissertations. The ProQOL measures two domains of the individuals' quality of life related to work: Compassion fatigue (CF) and compassion satisfaction (CS). CF encompasses two separate domains: Burnout and secondary traumatic stress (Stamm, 2010).

Stamm (2010) reports that compassion fatigue (CF) is the negative side of CS. Based upon that information; it is seen as not gaining pleasure from work and tiredness. CF is divided into two separate parts: burnout and Secondary Traumatic Stress (STS) (Stamm, 2010). The burnout component of CF is related to feelings of exhaustion, frustration, anger, and depression (Stamm, 2010). The STS component of CF is a “negative feeling driven by fear and work-related trauma” (Stamm, 2010, p. 8). Work-related trauma can be a blend of both direct exposures to traumatic stimuli and indirect exposures, which include exposures to individuals who have been exposed to traumatic events (Stamm, 2010). The STS component of CF is directly related to exposures of the indirect type (Stamm, 2010). This construct is not applicable to this study, as this study focuses on the direct exposures of the workers through violence and

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restraints and the relationship of these exposures with regard to finding work meaningful and pleasurable. CS will be the primary construct under investigation.

Compassion satisfaction (CS) refers to the pleasure that is derived from work (Stamm, 2010). This element has been identified in research by Wells et al. (2009) that was discussed in the previous chapter. Stamm (2010) specifically identifies this as the belief that the worker makes positive contributions to the greater good, performing well, and feelings towards colleagues. This concept specifically relates to providing care for youth by being able to help youth in times of need and positive beliefs regarding personal efficacy and perceptions of the work setting. A person experiencing CS is likely to experience a higher level of pleasure that is directly derivative of work activities (Stamm, 2010).

The directions state that the respondent is to report the response option that reflects his or her experience in the past 30 days. The items are measured on unipolar Likert scales from one to five. The manual provides a description on the scoring process for each scale. Several of the items for CF require reverse coding, but none of the items in the CS subscale require reverse coding. Stamm (2010) provides detailed stepwise instructions on the scoring process and provides equations to be used in statistical software packages. Stamm (2010) states that the scale can be used as part of a training program where respondents receive their scores via computer or self-scoring. She goes on to state that it is appropriate to administer the scale for research where the respondents will not receive information regarding final scoring, and this study employed the later of the options.

Stamm (2010) reports that the construct validity is good citing 200 published papers and over 1,000 articles available online. Research demonstrates an acceptable level for Cronbach's alpha: .91 (Thompson et al., 2014) and .91 (Hooper, Craig, Janvrin, Wetsel, &

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Reimels, 2010). The CS subscale is comprised of items 3, 6, 12, 16, 18, 20, 22, 24, 27, and 30.

For the purpose of this study, these items were extracted from the remainder and made available via the online survey. The CS subscale shows good reliability. The average score for this subscale is a raw score of 50 ( $SD = 10$ ; alpha scale reliability = .88) (Stamm, 2010). Twenty-five percent of respondents score higher than 57 and approximately 25% of respondents score below 43. Stamm (2010) indicates that the higher range reflects pleasure and positive feelings that are derivative of work, and the lower range identifies an individual that may find problems with work or other activities in life.

### **Informed Consent Procedures**

Informed consent was provided on the opening page of the survey. Participants gave consent by clicking the appropriate button at the end of the informed consent page. Participants were then directed to the survey for completion. Participants had the option to enter their email addresses in order to opt into the lottery for gift cards. Anonymity was provided for participants who did not enter their email addresses into the survey. Confidentiality was provided if participants chose to enter their email addresses into the lottery. The lottery was chosen through entering email addresses into a random list generator that provided the winner at the top of the list. If participants did not enter their email addresses, they did not have the ability to revoke their consent once the survey was submitted, as it was not be identifiable. If participants elected to provide their email addresses, consent could have been revoked up until the time of writing the final report. Consent could have been revoked by contacting the primary investigator by email. No participants chose to revoke their consent.

### **Human Participants and Ethics Precautions**

There were no known issues related to interactions with participants or participants' rights. Participants only provided identifying data if they elected to participate in the lottery via their email addresses. No identifying data was reported regarding the participants or the agencies where they worked. The participants were provided with the primary instigator's email address in case they had concerns or questions, or if they chose to revoke their consent after completing the survey. This was explained in the consent form. All copies of electronic data will be destroyed five years after completion.

There were no foreseeable risks with this study. There were no potential costs to the participants. There were, however, possible benefits of participation in this study. Participants had the opportunity to take a subsection of the Pro-QOL (fifth edition). This provided them with a time to reflect upon their compassion satisfaction; likewise, participants had the opportunity to reflect upon their satisfaction with their supervisors. Participants had the opportunity to receive a copy of the final manuscript to provide education and insight. Participants had the opportunity to enter into a lottery for one of two gift cards. This study posed the potential to have significant contributions to the sparse research regarding workers in residential facilities. If a relationship exists between violence and restraints, compassion satisfaction, and supervision, further research can then be conducted to develop stronger approaches to supervision of workers in residential facilities serving youth and better understand this phenomenon. This has implications for better serving the future generations of our society.

### Chapter Four: Results

Data were collected between March 20, 2016 and May 6, 2016. In total, 178 surveys were submitted through Qualtrics (version March, 2016). Surveys were initially analyzed for missing data that were instrumental to the hypotheses of the study. Thirty-seven surveys were excluded based on missing data that were related to aggression, supervision, and/or compassion satisfaction. Four surveys were excluded due to indicating that the participants did not have regular contact with youth in their daily routines. Two surveys were missing age, one survey was missing years of experience, and one survey was missing race; and these surveys were kept in the analyses, as the missing fields would not affect the testing of the hypotheses. The final sample size included 137 participants.

The data were visually analyzed for outliers using box plots. Mahalanobis Distance, Cook's Distance, leverage, and Standardized DFBeta scores were used to identify any cases that had extreme influence over the regression line. Histograms, Q-Q plots, and scatterplots were used to assess normality and heteroscedasticity. No cases were identified to be problematic, and all of the remaining 137 were used in the analyses.

#### Descriptive Statistics

**Demographic variables.** Males accounted for 45 (32.8%) of the participants, while females accounted for 92 (67.2%). The sample was predominately Caucasian ( $N=126$ , 92%). The remainder of the participants identified as African American ( $N=5$ , 3.6%), other ( $N=4$ , 2.9%), and Asian ( $N=1$ , .7%). One participant did not choose a category (.7%). The average age of the sample was 37.7 ( $SD=11.37$ ), with a range from 22 to 65, indicating a positive skew. The number of years of professional experience ranged from 1 to 42 and also maintained a positive skew ( $M=11.13$ ,  $SD=8.77$ ).

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The highest level of education completed included bachelor's degree ( $N=72$ , 52.6%), graduate degree ( $N=42$ , 30.7%), high school diploma ( $N=10$ , 7.3%), associate's degrees ( $N=8$ , 5.8%), and other ( $N=5$ , 3.6%). Supervisors and counselors accounted for the two largest categories of work role, each with 33 participants (24.1%). Together these two roles accounted for 48.2% of the sample. Direct care workers accounted for the third largest category ( $N=26$ , 19%). The remaining workers identified as administrators ( $N=17$ , 12.4%), other ( $N=12$ , 8.8%), teachers ( $N=11$ , 8%), nurses ( $N=3$ , 2.2%), and caseworkers ( $N=2$ , 1.5%).

Frequency statistics were computed that reported the level of education for individuals who identified themselves as supervisors ( $N=33$ ). One participant reported a high school diploma (3%), 2 participants reported an associate's degree (6.1%), 21 participants reported a bachelor's degree (63.6%), and 9 individuals reported a graduate degree (27.3%). The vast majority of individuals surveyed maintained a bachelor's degree or lower.

**Compassion satisfaction.** For the primary analyses, the raw scores for CS were used. Per Stamm (2010), in order to provide interpretation of the CS raw scores, the scores needed to be converted to z-scores and then t-scores centered around 50. Stamm (2010) provides syntax for SPSS to complete this conversion. The converted scores ranged from 16 to 64.92,  $SD=10$ . In this sample, 27% of individuals scored 43.52 or lower, 58.4% scored 51.16 or lower, and 26.3% scored above 57.28.

**Exposure to violence.** For the items assessing the frequency of witnessing verbal aggression directed at other workers, 67 (49%) reported daily, 61 (44.5%) reported weekly, 5 (3.6%) reported once per month, and 4 (2.9%) reported a few times per year. Zero participants reported not witnessing verbal aggression directed at other workers. With regard to receiving direct verbal aggression, 23 (16.8%) reported daily, 50 (36.5%) weekly, 33 (24.1%) once per



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month, 27 (19.7%) a few times per year, and 4 (2.9%) reported none within the last year. On the item measuring the frequency of witnessing of physical assault on other workers, 9 (6.6%) reported daily, 28 (20.4%) weekly, 19 (13.9%) once per month, 56 (40.9%) a few times per year, and 25 (18.2%) reported not within the last year. For the item probing the rate of direct assault, 1 (.7%) reported daily, 8 (5.8%) weekly, 12 (8.8%) once per month, 40 (29.2%) a few times per year, and 76 (55.5%) reported none within the last year. Out of the participants surveyed, 3 (2.2%) reported involvement in physical restraints daily, 23 (16.8%) weekly, 27 (19.7%) once per month, and 29 (21.2%) reported none within the last year.

**Experience of supervision.** Frequency of formal supervision was among the items regarding the participants' experiences of supervision. Two (1.5%) reported daily, 36 (26.3%) weekly, 51 (37.2%) once per month, 42 (30.7%) a few times per year, and 6 (4.4%) reported none within the last year. With regard to receiving debriefing 37 (27%) reported consistently every time, 34 (24.8%) most of the time, 27 (19.7%) sometimes, 23 (16.8%) rarely, and 16 (11.7%) never. To receiving support from their supervisors, 66 (48.2%) reported strongly agree, 31 (22.6%) moderately agree, 21 (15.3%) slightly agree, 5 (4.4%) neither agree nor disagree, 4 (2.9%) slightly disagree, 6 (4.4%) moderately disagree, and 3 (2.2%) strongly disagree. When responding to learning new skills from their supervisors, 31 (22.6%) answered strongly agree, 42 (30.7%) moderately agree, 27 (19.7%) slightly agree, 21 (15.3%) neither agree nor disagree, 5 (3.6%) slightly disagree, 7 (5.1%) moderately disagree, and 4 (2.9%) strongly disagree. When reporting on their supervisors helping them to better understand the clients with whom they work, 36 (26.3%) responded strongly agree, 35 (25.5%) moderately agree, 26 (19%) slightly agree, 28 (20.4%) neither agree nor disagree, 6 (4.4%) slightly disagree, 2 (2.2%) moderately disagree, and 3 (2.2%) strongly disagree. Finally with regard to their supervisors helping them

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deal with their emotions, 32 (23.4%), reported strongly agree, 31 (22.6%) moderately agree, 19 (13.9%), slightly agree, 25 (18.2%) neither agree nor disagree, 8 (5.8%) slightly disagree, 11 (8%) moderately disagree, and 11 (8%) strongly disagree. The frequencies related to exposure to aggression and CS are also presented in Table 1.

Table 1

### *Frequencies Regarding Survey Items*

	<i>Aggression Frequency Items</i>				
	<i>Rarely/ Never</i>	<i>A few times per year</i>	<i>Once per month</i>	<i>Weekly</i>	<i>Daily</i>
I witness verbal aggression from clients that is directed at other workers	0	4	5	61	67
I receive direct verbal aggression from clients	4	27	33	50	23
I am involved in using physical restraints with clients	29	55	27	23	3
I witness clients physically assaulting other workers	25	56	19	28	9
I am physically assaulted by clients	76	40	12	8	1

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### *Supervision Frequency Items*

	<i>Rarely/ Never</i>	<i>A few times per year</i>	<i>Once per month</i>	<i>Weekly</i>	<i>Daily</i>
I meet with my supervisor for formal supervision:	6	42	51	36	2
I receive debriefing from my supervisor after exposure to physical violence and restraints:	16	23	27	34	37

### *Supervision Quality Items*

	<i>Strongly disagree</i>	<i>Mod. disagree</i>	<i>Slightly disagree</i>	<i>Neither</i>	<i>Slightly agree</i>	<i>Mod. agree</i>	<i>Strongly agree</i>
My supervisor provides me with support.	3	6	4	6	21	31	66
My supervisor helps me learn new skills to enhance my work with clients.	4	7	5	21	27	42	31
My supervisor helps me better understand the clients with whom I work.	3	3	6	28	26	35	36
My supervisor helps me deal with my emotions related to my work.	11	11	8	25	19	31	32

### **Analyses**

Multiple regressions were conducted to determine whether there was any effect of the various predictors on the dependent variable compassion satisfaction using raw scores ( $N=137$ ,  $M=40.24$ ,  $SD=6.54$ ). During the literature review, no studies were found that examined the relationship among supervision, aggression, and CS. Items related to aggression and supervision were derived from the literature review. These items were regressed independently, as opposed to creating scales, to determine the unique indicators of each of these constructs. This approach allowed for more detail regarding how elements of aggression and supervision may affect CS. The significant items of each set were then analyzed through a moderation model using the statistical package PROCESS (version 2.15) for SPSS (Hayes, 2016).

**Aggression and compassion satisfaction.** The five items were entered as predictors into a multiple regression with compassion satisfaction as the dependent variable. The overall model approached statistical significance,  $R^2 = .068$ ,  $F(5, 131) = 1.90$ ,  $p=.098$ . The model results are provided in Table 2.

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Table 2

*Regression of Compassion Satisfaction on Indicators of Aggression*

	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
I witness verbal aggression from clients that is directed at other workers	1.74	1.02	.19	1.70	.091
I receive direct verbal aggression from clients	-1.88	0.70	-.31	-2.66	.009
I am involved in using physical restraints with clients	0.60	0.76	.09	0.78	.434
I witness clients physically assaulting other workers	-1.24	0.74	-.23	-1.68	.095
I am physically assaulted by clients	1.37	0.90	.19	1.52	.131

*Note.*  $R^2 = .07$

Each of the five items related to exposure to violence and aggression were regressed independently with compassion satisfaction. Direct verbal aggression was regressed with compassion satisfaction and approached significance, ( $R^2=.15$ ,  $F(1, 135)=3.14$ ,  $p=.078$ ). Direct verbal aggression maintained an inverse relationship with CS ( $R = -.151$ ). Witnessing verbal aggression at other workers did not have a significant effect on CS,  $R^2<.001$ ,  $F(1, 135)=.03$ ,  $p=.867$ . Involvement in physical restraints did not have a significant effect on CS,  $R^2<.001$ ,  $F(1, 135)=.02$ ,  $p=.876$ . Witnessing physical assault on other workers did not have a significant effect on CS,  $R^2=.006$ ,  $F(1, 135)=.88$ ,  $p=.349$ . Direct physical assault did not have a significant effect on CS,  $R^2<.001$ ,  $F(1, 135) = .01$ ,  $p=.934$ .

Direct physical assault was changed to a dichotomous variable, which identified participants as either being assaulted or not within the past year of work. Assault was changed to

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a dichotomous variable to determine if having any direct physical assault within the previous year had a relationship with CS, as opposed to the frequency of direct physical assault. An independent-samples t-test was conducted to compare the means of the two groups. No significant difference was identified between the CS scores of being assaulted ( $M=40.16$ ,  $SD=6.62$ ) and not being assaulted ( $M=40.30$ ,  $SD=6.52$ ),  $p=.902$ .

**Supervision and compassion satisfaction.** All six items within the supervision construct area were regressed with CS using the forced entry method. The six predictor variables maintained a significant relationship with CS,  $R^2=.19$ ,  $F(6, 130)=4.98$ ,  $p<.001$ . The model results are provided in Table 3.

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Table 3

*Regression of Compassion Satisfaction on Elements of Supervision*

	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
I meet with my supervisor for formal supervision:	.04	.65	.01	.07	.944
I receive debriefing from my supervisor after exposure to physical violence and restraints:	.76	.47	.15	1.63	.105
My supervisor provides me with support.	.18	.56	.04	.33	.741
My supervisor helps me learn new skills to enhance my work with clients.	-.80	.64	-.19	-1.25	.212
My supervisor helps me better understand the clients with whom I work.	1.29	.68	.28	1.88	.062
My supervisor helps me deal with my emotions related to my work.	.67	.45	.19	1.50	.134

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*Note.*  $R^2 = .19$

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The six variables were then regressed using the backward method in SPSS. The final model included the predictors regarding the supervisors helping the workers deal with emotions and debriefing after exposure to violence. This model was a significant predictor of CS,  $R^2=.16$ ,  $F(2, 134)=12.90$ ,  $p<.001$ . The model results are provided in Table 4.

Table 4

### *Backward Regression of Compassion Satisfaction on Supervision*

	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
I receive debriefing from my supervisor after exposure to physical violence and restraints	.79	.43	.16	1.81	.071
My supervisor helps me deal with my emotions related to my work.	1.01	.31	.29	3.25	.001

*Note.*  $R^2 = .16$

Another regression was conducted with all six variables using the stepwise method in SPSS. All but one variable was excluded from the final model, which pertained to supervisors helping workers deal with emotions. This final model had a significant effect on CS,  $R^2=.141$ ,  $F(1, 135)=22.11$ ,  $p<.001$ . Supervisors helping workers deal with emotions had the strongest relationship with CS,  $B=1.29$ ,  $SE B=.276$ ,  $\beta=.37$ ,  $t=4.70$ ,  $p<.001$ .

Upon examining the correlation coefficients, it was noted that there was correlation between all of the variables with regard to supervision. All of the items related to supervision correlated at a significant level,  $p<.01$ . For this reason, the six items related to supervision were checked for scale reliability ( $\alpha=.87$ ). The item related to the frequency of supervision was identified as a candidate for removal by the Cronbach's alpha if deleted criterion; upon its



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deletion the reliability of the scale was improved ( $\alpha=.88$ ). Additionally, the item related to receiving debriefing after exposure to violence was identified as a candidate for removal by the Cronbach's alpha if deleted criterion; upon its deletion the reliability of the scale was further improved ( $\alpha=.90$ ). There were no other items identified as candidates for removal. The final scale included the following items: "My supervisor provides me with support," "My supervisor helps me learn new skills to enhance my work with clients," "My supervisor helps me better understand the clients with whom I work," and "My supervisor helps me deal with my emotions related to my work." This scale was accomplished by summing the totals for each of the four variables.

One final regression was conducted using this new scale. The model significantly predicted CS and maintained the most significant relationship,  $R^2=.147$ ,  $F(1, 135)=23.33$ ,  $p<.001$ . The model results included  $B=.44$ ,  $SE B=.09$ ,  $\beta=.38$ ,  $t=4.83$ ,  $p<.001$ .

**Moderation models.** Finally, multiple moderation models were conducted to determine if supervision had any moderating effect on the relationship between violence and CS. These analyses were conducted using PROCESS for SPSS (Version 2.15) (Hayes, 2016). The only variable that approached significance with regard to types of aggression was direct verbal aggression. This variable was tested with the two variables associated with supervision that were identified by the backwards method within SPSS: supervisor helping deal with emotions and debriefing after exposure to violence. A third moderation model was then conducted with the final supervision scale.

The first moderation model was conducted with exposure to direct verbal aggression and supervisors helping workers deal with emotions. The overall model for these variables was significant,  $R^2=.155$ ,  $F(3, 133)$ ,  $p<.001$ . Within the model, only the supervisors helping to deal

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with emotions was significant ( $b=1.23$ , 95%  $CI$  [.63, 1.85],  $t=4.02$ ,  $p<.001$ ). Direct verbal aggression no longer approached significance ( $b=-.58$ , 95%  $CI$  [-1.64, .47],  $t=-1.094$ ,  $p=.275$ ). There was no significant moderation effect of supervision between direct verbal aggression and CS ( $b=.19$ , 95%  $CI$  [-.42, .80],  $p=.544$ ).

A second moderation model was conducted with direct verbal aggression and debriefing after exposure to violence. The overall model was significant,  $R^2=.12$ ,  $F(3, 133)=5.59$ ,  $p<.01$ . Supervisory debriefing was a significant predictor of CS,  $b=1.49$ , 95%  $CI$  [.67, 2.30],  $t=3.61$ ,  $p<.001$ . Direct verbal aggression approached significance with an effect on CS,  $b=-.98$ , 95%  $CI$  [-2.04, .09],  $t=-1.81$ ,  $p=.07$ . Supervisory debriefing was not a significant moderator of the effect of direct verbal aggression on CS,  $b=-.16$ , 95%  $CI$  [-.89, .57],  $t=-.43$ ,  $p=.67$ .

A third moderation model was conducted using the newly created final supervision scale and frequency of direct verbal aggression. The model again was significant,  $R^2=.161$ ,  $F(3, 133)=7.77$ ,  $p<.001$ . The final supervision scale had a significant effect on CS,  $b=.425$ , 95%  $CI$  [.24, .61],  $t=4.53$ ,  $p<.001$ . Direct verbal aggression did not have a significant effect on CS,  $b=.65$ , 95%  $CI$  [-1.68, .38],  $t=-1.25$ ,  $p=.216$ . There was no significant moderating effect of the final supervision scale on direct verbal aggression and CS,  $b=.04$ , 95%  $CI$  [-.15, .24],  $t=.45$ ,  $p=.651$ .

### **Chapter Five: Discussion**

The purpose of this study was to examine the effects of exposure to aggression and restraints on compassion satisfaction (CS) among workers in residential treatment centers that serve youth. In addition, supervision was examined to determine if there was any moderating effect on the reduction of CS due to exposure to aggression, violence, and restraints. This study had two research questions:

#### **Research Questions**

- 1) Is frequency of exposure to verbal aggression, physical aggression, and restraints related to compassion satisfaction for workers in youth residential treatment facilities?
- 2) Do frequency and/or quality of formal supervision moderate the relationship between frequency of exposure to verbal aggression, physical aggression, and restraints, and compassion satisfaction for workers in youth residential treatment facilities?

#### **The Characteristics of the Sample**

The primary target sample of this study was direct care workers. Unfortunately, only 26 (19%) of the respondents identified as direct care workers specifically; however, all of the 137 respondents included in the study reported having regular contact with youth during their daily routines. Directors of facilities were asked to forward the survey to all employees who had regular contact with youth during their daily routines. Directors commonly reported that most employees maintained a high frequency of contact with youth in their daily routines. Many directors also reported that direct care workers did not have access to email at their respective facilities; therefore, they would not be able to complete the survey online. With regard to education, 83.3% of the participants reported having a Bachelor's Degree or higher. Females accounted for 67.2% of the sample and males only 32.8%.

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With regard to witnessing verbal aggression, 100% of the sample reported witnessing it within the last year. Nearly half (48.9%) of the population reported witnessing verbal aggression that was directed at other workers daily. Only 18.8% of the sample reported receiving direct verbal aggression daily. Over half (53.3%) of the sample reported receiving direct verbal aggression at least monthly. With regard to physical restraints, 78.8% of the sample reported being involved in at least one physical restraint within the last year, and 38.7% of the sample reported being involved in physical restraints at least monthly. The sample was composed of 18.2% of individuals who had not witnessed a physical assault within the last year and 55.5% of individuals who had not been physically assaulted within the last year. Nearly half of the sample (44.5%) had been assaulted during the previous year. Research by Mathews (1998) reports that 68% of workers were physically assaulted and 89% reported a previous trauma of some type; the percentages in the current study are slightly lower, though this difference may be due to the Mathews (1998) study being conducted nearly 20 years ago. Despite the difference with the Mathews' (1998) findings, the present study provides further evidence of the pervasive nature of aggression in residential treatment centers for youth, and that it is a serious problem that requires attention.

The vast majority of the sample reported formal supervision occurring monthly or less (72.3%), with 35% of the sample reported that supervision occurred either rarely or never. When reporting on support, 86.1% of the sample had favorable perceptions of support from their supervisors. With regard to supervisors teaching new skills, 73% of the population had favorable perceptions. With regard to supervisors help to deal with supervisors helping workers deal with emotions, 59.9% of the sample had favorable ratings. Overall, the distribution for the questions related to supervision had a negative skew and were favorable. When considering the rate of

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higher education within the subsample of supervisors, I believe that there lies an opportunity to further enhance the efficacy of the supervisors. Graduate degrees only accounted for 27.3% of the individuals who identified themselves as supervisors. It would be interesting to probe what education has been provided to these individuals outside of formal training from a university.

This point is mostly related to the assertion by Foster and McAdams (1998), that most supervisors in these settings lack adequate formal training to facilitate them being effective supervisors. The results of this study indicated that perceptions of supervision were predictive of the CS scores of the workers. The gap in education provides a possible opportunity to improve the quality of the supervision. It seems that many of the participants who identified themselves as supervisors may have been inadequately equipped to perform supervisory responsibilities in terms of their formal education through universities.

### **Aggression and Compassion Satisfaction**

This study assessed five types of aggression that workers may encounter during their workdays:

- 1) witnessing verbal aggression directed at other workers
- 2) direct verbal aggression
- 3) involvement in physical restraints
- 4) witnessing physical assault on other workers
- 5) direct physical assault

No significant effects of any of these types of aggression upon CS were evident through the analyses; however, direct verbal aggression did approach significance. Although direct verbal aggression did not meet the probability level for significance, the trend toward significance ( $p=.078$ ) suggests there may be some evidence that a higher frequency of direct

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verbal aggression may decrease the workers' levels of CS. Contrary to the expectations, frequency of direct physical assault did not approach significance,  $p=.934$ . When changed to a dichotomous variable (i.e., whether an individual was assaulted or not within the last year), direct physical assault still had no significant effect on CS ( $p=.902$ ). Based upon the research that was presented in the literature review, it seems logical to expect that exposure to physical aggression would result in a reduction of CS. There was no evidence to support this relationship in this study. It is plausible that the workers in the current study are so acclimated to witnessing and receiving direct physical aggression that they may be desensitized to the point where it does not affect their levels of CS. These workers may consider direct physical aggression as a common feature of their work. The current study examined the effects of receiving direct physical aggression on the workers' CS in a general sense; however, this study did not provide any insight with regard to experiencing CS to the youth who committed the act of physical aggression towards the workers. Any reduction in CS may be more specifically directed at the specific youth who demonstrated the assaultive behaviors, as opposed to general attitudes regarding work.

It is interesting that verbal aggression, rather than direct physical aggression, seemed to influence CS scores in a negative direction. It would seem logical that receiving direct physical assault would have a stronger negative impact on CS. Direct physical assault would seem to carry with it a strong emotional response, while verbal aggression a lesser response. This unexpected relationship may be due to the frequency at which workers are exposed to the different types of aggression. More than half of the sample reported receiving direct verbal aggression at least monthly, while only 17% of the participants reported being physically

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assaulted on a monthly basis. It may be that the frequency of exposure may be more important than the type of aggression itself.

Much research asserts that CS maintains a negative correlation with burnout and compassion fatigue (CF) (Conrad & Kellar-Guenther, 2006; Hunsaker et al., 2015; Kraus, 2005; Rossi et al., 2012; Smart et al., 2014; Van Hook & Rothenberg, 2009). The current study did not measure burnout or CF; however, the findings of the current study can be compared to studies examining burnout and CF in the context of the relations among these constructs as established in this previous research. For example, Newbill et al. (2010) reported that workers who were assaulted more frequently by clients demonstrated a higher frequency of aversive interactions, including demanding, poor limit setting, and denying youths' requests. It is likely that workers who demonstrate these aversive interactions would be experiencing a lesser degree of CS. These would be contrary to Stamm's (2010) definition that workers who experience CS have satisfaction and positive feelings towards their work and those they help. Based upon these points, the assertions by Newbill et al. (2010) were not supported in the present study, as direct physical assault did not demonstrate a significant relationship with CS.

Qualitative research by Steckley (2010) highlighted reports made by workers who were frustrated with restraints. These workers were frustrated with their inability to help the youth effectively deal with emotions before they would escalate to the extent where physical restraint was necessary. Earlier work by Steckley and Kendrick (2008) highlighted dissonance with workers having to balance the maintenance of a safe environment with maintaining the dignity and respect of the youth. Bonner et al. (2002) reported that many workers were frustrated with their failure to meet the needs of the youth and difficulties in communication. Steckley and Kendrick (2008) reported that one-third of the workers reported feelings of guilt, doubt, or defeat

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following the restraint. Steckley (2010) found that one-third of the workers reported feeling unsupported by supervisors following a restraint. It is difficult to interpret the results of the current study within the context of the research listed in this section. With this sample, there was no significant effect for the frequency of restraints on CS,  $p=.876$ . The research by Bonner et al. (2002), Steckley (2010), and Steckley and Kendrick (2008) seems to suggest that workers would experience lower CS based upon exposure to restraints. A contrary hypothesis may be that the presence of a high level of CS creates the negative thoughts and feelings such as guilt (Steckley, 2010) and frustration (Bonner et al., 2010). Plausibly, if workers have strong senses of CS, they may be more apt to feel such negative consequences based upon their expectations of themselves.

Auerbach, Quick, and Pegg (2003) connected perceptions of dangers within the environment with burnout. This should lead to a reduction in CS; however, this was not the case for this sample. None of the five types of aggression, whether they were regressed together or independently were significant predictors of CS scores. Together the five types of aggression accounted for only 6.8% of the variance of CS scores. Direct verbal aggression approached significance ( $p=.078$ ), but the predictor only explained 2.3% of the variance in CS scores.

Kapoulitas and Corcoran (2015) qualitatively explored how experiences within the environments with professionals providing in-home services affected feelings of burnout. In this work, unpredictability, and hostility emerged as contributors to an increase in CF. Kapoulitas and Corcoran's (2015) conclusions were not supported by the current study. It may be hypothesized that the workers in the facilities surveyed are so acclimated to their environments that unpredictability does not exist or is minimized. In a sense, these workers may have adapted



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to the presence of dangers in their environments. These workers may be well aware of the dynamics within their environments, and therefore, any negative effects may be diminished.

### **Supervision and Compassion Satisfaction**

This study sought to determine if supervision had an effect on CS. Six aspects of formal supervision were entered as predictors:

- 1) The frequency the workers received formal supervision.
- 2) The frequency the workers received debriefing from the supervisors after exposure to violence.
- 3) The workers feeling supported by their supervisors.
- 4) The workers' perceptions that they learn new skills from their supervisors to better help youth.
- 5) The supervisors' abilities to help the workers better understand and conceptualize clients.
- 6) The supervisors' abilities to help the workers deal with emotions related to their work.

Initially, all six predictors were entered into the multiple regression using forced entry. The model that included all six predictors was significant and explained 18.7% of the variance in CS scores,  $p < .001$ . The backward method left two variables in the model, one related to emotional support and the other related to debriefing, and the model maintained significance and explained 16.1% of the variance in CS scores,  $p < .001$ . An additional step of stepwise regression improved the model leaving the variable emotional support in the model and explained 14.1% of the variance in CS scores.

Upon examining the correlation table, it was evident that all six variables maintained moderate correlations. Scale reliability analyses were conducted on the six items while checking for potential improvement of intercorrelations among the items using SPSS's "Cronbach's alpha

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if item deleted” output. The predictors related to frequency of supervision and debriefing were both identified as candidates for removal. The final scale consisted of four items ( $\alpha=.90$ ) which queried supervisory support, teaching new skills, conceptualization of clients, and supervisory help with dealing with emotions. This final supervision scale was the most significant predictor of CS and accounted for 14.7% of the variance in CS scores,  $p<.001$ .

These results highlight the need of quality supervision. The quality of supervision was more predictive of CS scores than frequency. Existing research suggests the relationship between supervisory support and burnout is strong (Auerbach et al., 2003; Hunsaker et al., 2015). Considering the negative correlation between burnout and CS established in previous studies, the results of this current study are not surprising.

Wells et al. (2009) identified that the functionality of the work environment has an effect on the burnout of workers. As environments became more dysfunctional and had higher entropy, levels of burnout increased. Bowers et al. (2011) assert that leadership has a direct effect on the level of functioning. It is possible that the CS scores of workers reporting positive characteristics of their supervisors were much higher, because their supervisors impacted the environment as well as the individual workers. The supervisors for these participants may have enhanced the environment and developed a more functional environment where they could experience more CS. This dynamic could explain the diminished effect of unpredictability and possible dangers, which could possibly enhance CS. Such a dynamic would highlight the supervisor as a control parameter through the lens of Dynamic Systems Theory (DST).

Burford (1988) found a common theme among workers who were experiencing high levels of stress was that they believed that they needed to show restraint with their supervisors in voicing their opinions. This perceived need to demonstrate restraint was related to fearing

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consequences that would possibly be administered by the supervisor (Burford, 1988). This is directly related to the predictor of workers feeling supported by their supervisors. If workers feel high levels of support from their supervisors, they are more likely to verbalize their opinions. This could potentially lead to lower levels of discontent and higher levels of CS. Fearing reprisal presents an opportunity to add an item for testing to the final supervision scale.

Thompson et al. (2014) found that positive perceptions of the work environments were related to lower levels of CF with counselors. Supervisors may be in a role to enhance and reframe any negative perceptions on the part of the worker. This could be related to the item on the final supervision scale that queried how the supervisors help the workers to better understand the clients with whom they work.

Recent research has linked individuals with histories of trauma to an increase in CF (de Figueiredo et al., 2014; Ray et al., 2013). Ray et al. (2013) hypothesized that workers with trauma histories may over empathize with clients and experience CF. Rossie et al. (2012) found no relationship between trauma histories and CS. Perkins and Sprang (2013) conducted qualitative interviews with individuals in a substance abuse setting. Interviewees suggested that having a personal history with addiction or a family member with an addiction was a risk factor for CF. These four studies are relatable to the predictors of supervisors helping workers to better understand clients, provide support, and helping to deal with emotions. It is plausible that these predictors would allow the workers to cope in a healthier way with their own histories through the process of supervision. Again, the supervisor is placed in another control parameter within the dynamic environment.

The qualitative research of Kapoulitsas and Corcoran (2015) was conducted with social workers in community settings, and supervision and debriefing were major themes that the

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participants viewed both supervision and debriefing as being protective against the onset of CF. One interviewee highlighted that frequent supervision was not enough, but supervision also had to be of good quality. This interviewee stated that there had to be the belief that supervisors were competent. This interviewee's statement is supported by the current study. Frequency of supervision was removed from both the stepwise and backward methods and maintained the weakest relationship with CS. Although debriefing did have significant predictive power with CS, it did not explain as much variance in CS scores as the supervisors helping to deal with the emotions of the workers. Neither of the predictors related to frequency or debriefing were kept in the final supervision scale based upon their reducing the reliability of the scale.

Overall, this study highlighted the importance of competent supervision for workers in residential facilities. This study not only showed the value of frequent supervision, but it also highlighted the importance of supervisors providing thorough and well-rounded clinical supervision that focuses on multiple aspects of the workers' jobs and personal reactions to work. In this particular sample, the final supervision scale maintained a very high level of significance with CS,  $p < .001$ . This study focused specifically on workers in youth residential facilities who are exposed to a high frequency of aggression. Minimal research has explored the beneficial effects of supervision for these workers. It is likely that workers in these settings benefit greatly from the support and guidance of a senior member of the profession with regard to developing skills and growing as a professional. The strong positive relationship between supervision and CS may very well be due to many dynamics. Supervisors are in roles to help workers develop skills, understand the work in front of them, process the events, and maintain awareness of the meaning and significance of their work. The current study adds to the existing body of literature regarding the importance of strong supervision in the helping profession.

### **Moderation and Dynamic Systems Theory**

The previous sections have discussed the finding between violence and CS, in addition to supervision and CS. The main purpose of this study was to identify a moderating effect of supervision on any relationship between violence and CS, as conceptualized through a metaphorical lens of Dynamic Systems Theory (DST). The ability to identify any moderating effect was somewhat restricted due to the limited effect of the types of aggression upon CS. Within all of the types of aggression, direct exposure to verbal aggression was the only predictor that neared significance,  $p=.078$ . To test for moderation, supervisors helping to deal with emotions, supervisory debriefing, and the supervisory scale were used as moderating variables. There were no significant interaction effects between the elements of supervision with direct verbal aggression and CS.

The supposition laid out in chapter one, through the lens of DST, was that exposure to violence would lead to a decrease in CS. Although direct verbal aggression approached significance, this supposition was unsupported by the data, nor was there any observed moderating effect of supervision between exposure to aggression and CS. Supervision on its own maintained a strong effect on CS. It seems that direct verbal aggression could possibly have a negative effect on decreasing CS, and supervision had strong support that it has a positive effect on increasing CS, but the expected moderation among the variables was not present. This certainly does not disqualify the interpretation of residential work through the lens of DST; however, it suggests pivoting the focus towards identifying the other factors that are present within the environment may prove more fruitful toward understanding what functions most prominently toward an impact on CS.

### **Commentary Remarks: Issues Related to Data Collection**

The process of collecting data for this study brought its own set of concerns. Facilities were contacted in Pennsylvania, Ohio, Maryland, New York, and Virginia. Detailed documentation was maintained to properly track the facilities that were contacted to assure that they were not harassed. After two left messages with directors, facilities were marked as such to prevent further contact attempts and possible perceptions of harassment. Responses ranged greatly from excitement to participate, to what seemed to be apprehension regarding the research topic. This is something that I expected to a certain extent, but probably not to the extent to which I experienced. In total, 118 individual facilities were contacted across the states listed previously. A total of 21 (17.8%) facilities agreed to distribute the survey via email to the workers. A total of 77 (65.25%) facilities failed to return initial and follow-up phone calls. The remaining 20 facilities varied in their responses. One facility hung up the phone after I spoke the word “research.” Many of these other facilities overtly declined participation. One facility stated that they “did not do research.” Four facilities responded that things were currently chaotic at their sites, and it was not a good time for them to participate. Participation was also declined by a government agency of one of the states by stating a lack of interest. I wrongfully expected government agencies to believe they have enough of a stake in understanding the dynamics of their work places that they would contribute to this study.

Directors of multiple facilities stated that their direct care workers did not have access to email addresses associated with the company. This limitation prevented the survey from capturing data from those specifically in direct care positions. Some facility directors seemed to have a stake in the research and reported that there were currently initiatives at their sites

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focusing on burnout. The directors of these facilities verbalized a strong desire for the results and final manuscript.

### **Limitations**

A major limitation of this study was that it was a survey design that required workers to report the frequency at which they were exposed to violence. This limitation opens the data up to recall bias. It would be difficult for workers to report the frequency at which they experience various types of violence and aggression with complete accuracy. The survey did not measure the severity of the violence that was experienced by the workers. It simply asked the workers to define the frequency in a categorical manner. This assumes that all experiences of violence would be the same and other factors such as severity and duration would not be significant. It is unlikely that this is the case.

With regard to supervision, participants were asked to rate how well their supervisors were at certain aspects of supervision. These ratings were subjective in nature; however, the survey defined the parameters of formal supervision. It did not provide insight into specific modalities and theories related to the delivery of formal clinical supervision. The survey did not use a previously existing questionnaire, but instead, it used questions that were derived from the literature review. While the supervision questions did show good reliability when considered as a scale, certainly further development of scales assessing supervision and aggression in youth residential treatment centers is called for.

This study's main purpose was to understand the role of violence and supervision within the work of the direct care worker. Few direct care workers participated in the study relative to the total sample size. This was due to issues related to sampling discussed in previous sections.

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However, all workers reported maintaining regular direct contact with youth during their daily routines.

This study deliberately focused on CS, instead of CF, burnout, or STS, in an effort to take a positive approach to helping workers in residential settings. In hindsight, it would have been helpful to have scores on burnout and CF in addition to CS scores. The results of this study could give some readers the impression that exposure to violence in these settings has no negative effects, which is hardly the case; indeed, the negative effects of restraints and aggression upon direct care workers are well-documented (Bonner et al., 2002; Mathews, 1998; Steckley, 2010; Steckley & Kendrick, 2008).

This study used DST as a lens through which the core concepts and possible interactions could be conceptualized. In its truest sense, DST uses nonlinear computer modeling to determine dynamic interactions among variables of a system (Gelfand & Engelhart, 2012). This study only used statistical analyses based on the linear model. Furthermore, this study inferred that workers experiencing high levels of CS would demonstrate a higher frequency of helpful behaviors towards the youth, which would decrease the frequency of dysfunctional behaviors demonstrated by the youth. No observations or measures were conducted that provided any evidence for this inference. This study also failed to explore other variables that exist within the dynamic system of residential treatment facilities. The literature review provides a plethora of other variables that potentially play a role in this complex and dynamic environment.

### **Future Research**

Future research should focus on the aspects of supervision that were determined to have significant effects on CS. This study added to the body of existing literature that highlights the importance of supervision. Specifically, this study has laid the groundwork for a better



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understanding of how supervision affects those who serve youth in residential facilities. Each item under supervision that was a significant predictor of CS merits further exploration. With regard to supervisors helping workers deal with emotions related to work, what supervisory practices are effective within this variable? Each predictor variable may be broken down to provide a better understanding of how supervisors can achieve each objective. Such data could be used to develop training programs to further develop supervisors as competent practitioners.

This study focused solely on CS. Future research could include the variable of burnout, STS, and CF to form a better understanding of the positive effects of supervision. This study did not provide information on supervision as a moderator between violence and CF. The literature review presented research that connected violent exposure to workers experiencing trauma symptoms (Bloom, 2011; Mathews, 1998; Ryan et al., 2008). Future research could examine supervision as a moderator of this dynamic. Through these types of analyses, we will be better equipped to train supervisors in residential settings with youth.

The types of information gathered regarding exposure to violence and aggression merits expansion. As stated in the previous section, this study did not collect information regarding the severity of aggression. Future research could also focus on the severity of aggression, although this is more than likely a phenomenological and subjective experience for each individual. In order to eliminate the recall bias with aggression, future research could be conducted within a single facility, and data regarding violence could then be extracted from documentation and incident reports. This design would allow for some of the variables related to aggression to be true continuous variables. Record reviews provide an opportunity to gather information related to injuries due to exposure to aggression and restraints. This type of data may help measure the severity of exposures to aggression.

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Although not all within the focus of this study, many valid questions were raised within the literature review. Previously discussed studies reported on the demographic variable of race and CF (Blevins et al, 2006; Liou, 1995). Future research could focus on the role of race within this dynamic system. Does predominately working with youth of a race that is different from the workers have an impact on CS?

### **Summary and Conclusion**

This study was designed to determine if exposure to violence and restraints had a negative effect on the CS scores of workers in residential treatment settings with youth. Supervision was also examined to determine if it had a positive effect on CS scores, and supervision was examined as a moderating variable between violence and CS. Direct exposure to verbal aggression was the only type of violence that approached significance as having a negative effect on the CS scores of the sample.

However, all of the predictors regarding supervision showed significant effects upon the CS scores of the workers. Supervisors helping workers deal with emotions related to work was the most significant predictor within the domain of supervision. The most predictive power was achieved by combining the four variables that showed good alpha scale reliability:

- 1) Supervisors helping workers deal with emotions.
- 2) Workers feeling as though supervisors provided support.
- 3) Supervisors teaching new skills to enhance work with clients.
- 4) Supervisors helping workers to better understand clients with whom they work.

There was no evidence that supervision had any moderating effect on the weak relationship between direct verbal aggression and CS. It seems that supervision had a strong positive impact on CS, and exposure to direct verbal aggression may have a negative effect on

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CS. However, these two variables seem to operate independently on the outcome variable of CS scores.

This study conceptualized the variables through a lens of DST. In this conceptualization, the interactions of the workers and clients were identified as a possible attractor. An attractor is a state at which a system shows preference for operation (Guastello & Liebovitch, 2009). In this attractor, it was hypothesized that the frequency of exposures to aggressive and dysfunctional behaviors of the youth would decrease the CS of the workers. There is limited support for this hypothesis based upon the results of this study. It was also hypothesized, in the theoretical path analysis, that the workers who had less CS would experience a higher rate of dysfunctional behaviors due to their counterproductive thoughts and feelings towards the youth. This possible dynamic was not specifically tested. Supervisors were included as a control parameter to moderate any negative effects of violence on CS. Control parameter refers to relationships that exist within dynamic systems that are amendable to outside influences and act as targets for interventions (Guastello & Liebovitch, 2009). Although there was no support for this moderating effect, there is strong support for supervisors acting as a control parameter, but for other variables that exist within these complex and dynamic facilities. This assertion is inferred because of the strong positive relationship between supervision and CS. There was strong evidence that supervision was predictive of CS scores. There was limited evidence that aggression had an effect on CS scores; however, there was a high level of variability in the CS scores of the workers. This variability is due to other factors that exist within the dynamic system of residential facilities or the intrinsic systems of the workers.

By definition, complex systems are those that have many variables that seem to act at random, but that seemingly random behavior is determined by the other variables within the

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system (van Geert, 2009). Dynamic systems have the ability to evolve and change without outside influence (van Geert, 2009). Much of this change and evolution of the system is resultant of feedback loops and recursion (Gelfand & Engelhart, 2012). This study provides minimal support for the hypothesis that workers who are exposed to violence experience lower levels of CS, which through feedback loops, exacerbate the behaviors of the youth. This study provides no support for supervision acting as a control parameter in this dynamic relationship. Strong support is provided that suggests that supervision is important in enhancing the CS of the workers. Future research should focus on how to improve this supervision and identify the other variables that exist within this dynamic system that negatively influence CS.

### References

- Altucher, N. (1967). Constructive use of the supervisory relationship. *Journal of Counseling Psychology, 14*(2), 165-170.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5<sup>th</sup> ed.). Washington, DC: Author.
- Auerbach, S. M., Quick, B. G., & Pegg, P. O. (2003). General job stress and job-specific stress in juvenile correctional officers. *Journal of Criminal Justice, 31*(1), 25-36.
- Baker, A. L., Fulmore, D., & Collins, J. (2008). A survey of mental health service provision in New York State residential treatment centers. *Residential Treatment for Children & Youth, 25*(4), 333-357.
- Beidas, R. S., Marcus, S., Wolk, C. B., Powell, B., Aarons, G. A., Evans, A. C., & ... Mandell, D. S. (2015). A prospective examination of clinician and supervisor turnover within the context of implementation of evidence-based practices in a publicly-funded mental health system. *Administration and Policy in Mental Health and Mental Health Services Research*. Advance online publication.
- Ben-Dror, R. (1994). Employee turnover in community mental health organization: A developmental stages study. *Community Mental Health Journal, 30*(3), 243-257.
- Birk, J. M. (1972). Effects of counseling supervision method and preference on empathic understanding. *Journal of Counseling Psychology, 19*8, 542-546.
- Blevins, K. R., Cullen, F. T., Frank, J., Sundt, J. L., & Holmes, S. T. (2006). Stress and satisfaction among juvenile correctional workers: A test of competing models. *Journal of Offender Rehabilitation, 44*(2-3), 55-79.

## A DYNAMIC SYSTEM

- Bloom, H. (2011). Managing the aftermath of patient-on-staff violence. *Psychiatric Times*, 28(2), 56.
- Bonner, G., Lowe, T., Rawcliffe, D., & Wellman, N. (2002). Trauma for all: a pilot study of the subjective experience of physical restraint for mental health inpatients and staff in the UK. *Journal of Psychiatric & Mental Health Nursing*, 9(4), 465-473.
- Borders, L. D., Glosoff, H. L., Welfare, L. E., Hays, D. G., DeKruyf, L., Fernando, D. M., & Page, B. (2014). Best practices in clinical supervision: Evolution of a counseling specialty. *The Clinical Supervisor*, 33(1), 26-44.
- Bowers, L., Nijman, H., Simpson, A., & Jones, J. (2011). The relationship between leadership, teamworking, structure, burnout and attitude to patients on acute psychiatric wards. *Social Psychiatry & Psychiatric Epidemiology*, 46(2), 143-148.
- Burford, G. E. (1988). The identification of stressful events and working conditions by group home personnel. *Journal of Child Care*, 3(6), 95-110.
- Byrne, A. M., & Sias, S. M. (2010). Conceptual application of the discrimination model of clinical supervision for direct care workers in adolescent residential treatment settings. *Child & Youth Care Forum*, 39(3), 201-209.
- Center for Substance Abuse Treatment. (2009). Clinical supervision and professional development of the substance abuse counselor: Information you need to know. In *Treatment Improvement Protocol (TIP) Series: No. 52. Clinical supervision and professional development of the substance abuse counselor* (Part 1, Chapter 1). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <http://www.ncbi.nlm.nih.gov/books/NBK64848/>

## A DYNAMIC SYSTEM

- Ceja, L., & Navarro, J. (2011). Dynamic patterns of flow in the workplace: Characterizing within-individual variability using a complexity science approach. *Journal of Organizational Behavior*, 32(4), 627-651.
- Connor, D. F., McIntyre, E. K., Miller, K., Brown, C., Bluestone, H., Daunais, D., & LeBeau, S. (2003). Staff retention and turnover in a residential treatment center. *Residential Treatment for Children & Youth*, 20(3), 43-52.
- Cunningham, J., Connor, D. F., Miller, K., & Melloni, R. J. (2003). Staff survey results and characteristics that predict assault and injury to personnel working in mental health facilities. *Aggressive Behavior*, 29(1), 31-40.
- de Figueiredo, S., Yetwin, A., Sherer, S., Radzik, M., & Iverson, E. (2014). A cross-disciplinary comparison of perceptions of compassion fatigue and satisfaction among service providers of highly traumatized children and adolescents. *Traumatology*, 20(4), 286-295.
- Edwards, J. K., & Chen, M. (1999). Strength-based supervision: Frameworks, current practice and future directions. *The Family Journal*, 7(4), 349-357.
- Ellis, A. (1995). *Better, deeper, and more enduring brief therapy: The rational emotive behavior therapy approach*. Bristol, PA: Brunner/Mazel.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.
- Foster, V. A., & McAdams, C. I. (1998). Supervising the child care counselor: A cognitive developmental model. *Child & Youth Care Forum*, 27(1), 5-19.

## A DYNAMIC SYSTEM

- Gascon, S., Leiter, M. P., Andrés, E., Santed, M. A., Pereira, J. P., Cunha, M. J., & ... Martínez Jarreta, B. (2013). The role of aggressions suffered by healthcare workers as predictors of burnout. *Journal of Clinical Nursing*, 22(21-22), 3120-3129.
- Gelfand, L. A., & Engelhart, S. (2012). Dynamical systems theory in psychology: Assistance for the lay reader is required. *Frontiers in Psychology*, 3, 1-32.
- Goldstein, J. (1997). Social Psychology and nonlinear Dynamical Systems Theory. *Psychological Inquiry*, 8(2), 125.
- Guastello, S. J. & Liebovitch. (2009). Introduction to nonlinear dynamics and complexity. In S. J. Guastello, M. Koopmans, & D. Pincus (Eds.), *Chaos and complexity in psychology: The theory of Nonlinear Dynamical Systems* (pp. 1-36) New York, NY: Cambridge University Press.
- Hayes, A. F. (2016). *PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling* [White paper]. Retrieved from <http://processmacro.org/index.html>.
- Holloway, E. L., & Hosford, R. E. (1983). Supervision in counseling: II. Integration and evaluation: Towards developing a prescriptive technology of counselor supervision. *The Counseling Psychologist*, 11(1), 73-77.
- Hooper, C., Craig, J., Janvrin, D. R., Wetsel, M. A., & Reimels, E., (2010). Compassion satisfaction, burnout, and compassion fatigue among emergency nurses compared with nurses in other selected inpatient specialties. *Journal of Emergency Nursing*, 36, 420–427.



## A DYNAMIC SYSTEM

- Hunsaker, S., Chen, H., Maughan, D., & Heaston, S. (2015). Factors That Influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. *Journal of Nursing Scholarship*, 47(2), 186-194.
- Jordan, B. (2011, January 10). ACA Blog: Clinical supervision [Web log comment]. Retrieved from <http://www.counseling.org/news/blog/aca-blog/2011/01/10/clinical-supervision>.
- Kapoulitsas, M., & Corcoran, T. (2015). Compassion fatigue and resilience: A qualitative analysis of social work practice. *Qualitative Social Work: Research and Practice*, 14(1), 86-101.
- Kraus, V. I. (2005). Relationship between self-care and compassion satisfaction, compassion fatigue, and burnout among mental health professionals working with adolescent sex offenders. *Counseling & Clinical Psychology Journal*, 2(2), 81-88.
- Lakin, K. C., Bruininks, R. H., Hill, B. K., & Hauber, F. A. (1982). Turnover of direct-care staff in a national sample of residential facilities for mentally retarded people. *American Journal of Mental Deficiency*, 87(1), 64-72.
- Lakin, K. C., Hill, B. K., Bruininks, R. H., Hauber, F. A., & Krantz, G. C. (1983). Factors related to job stability of direct-care staff of residential facilities for mentally retarded people. *Journal of Community Psychology*, 11(3), 228-235.
- Lambert, E. G., Altheimer, I., & Hogan, N. L. (2010). Exploring the relationship between social support and job burnout among correctional staff. *Criminal Justice and Behavior*, 37(11), 1217-1236.
- Lanning, W. L. (1971). A study of the relation between group and individual counseling supervision and three relationship measures. *Journal of Counseling Psychology*, 18(5), 401-406.

## A DYNAMIC SYSTEM

- Liou, K. T. (1995). Role stress and job stress among detention care workers. *Criminal Justice and Behavior*, 22(4), 425-436.
- Lobina, D. J. (2014). Probing recursion. *Cognitive Processing*, 15(4), 435-450.
- Loganbill, C., Hardy, E., & Delworth, U. (1982). Supervision: A conceptual model. *The Counseling Psychologist*, 10(1), 3-42.
- Lundstrom, M., Graneheim, U. H., Eisemann, M., Richter, J., & Astrom, S. (2007). Personality impact on experiences of strain among staff exposed to violence in care of people with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities*, 4(1), 30-39.
- Malikiosi-Loizos, M., Gold, J. A., Mehnert, W. O., & Work, G. G. (1981). Differential supervision and cognitive structure effects on empathy and counseling effectiveness. *International Journal for the Advancement of Counselling*, 4(2), 119-129.
- Masters, M. A. (1992). The use of positive reframing in the context of supervision. *Journal of Counseling & Development*, 70(3), 387-390.
- Matthews, L. R. (1998). Effect of staff debriefing on posttraumatic stress symptoms after assaults by community housing residents. *Psychiatric Services*, 49(2), 207-212.
- Matz, A. K., Wells, J. B., Minor, K. I., & Angel, E. (2013). Predictors of turnover intention among staff in juvenile correctional facilities: The relevance of job satisfaction and organizational commitment. *Youth Violence and Juvenile Justice*, 11(2), 115-131.
- Nereim, V. (2001, June 27). Staff turnover at youth homes makes job more perilous. *The Pittsburgh Post-Gazette*. Retrieved from <http://www.post-gazette.com>.

## A DYNAMIC SYSTEM

Newbill, W. A., Marth, D., Coleman, J. C., Menditto, A. A., Carson, S. J., & Beck, N. C. (2010).

Direct observational coding of staff who are the victims of assault. *Psychological Services*, 7(3), 177-189.

Pennsylvania Department of Public Welfare. (2015). *Chapter 3800: Child residential and day treatment facilities*. Retrieved from <http://www.pacode.com/secure/data/055/chapter3800/chap3800toc.html>.

Perkins, E. B., & Sprang, G. (2013). Results from the Pro-QOL-IV for substance abuse counselors working with offenders. *International Journal of Mental Health and Addiction*, 11(2), 199-213.

Potter, P., Deshields, T., Divanbeigi, J., Berger, J., Cipriano, D., Norris, L., & Olsen, S. (2010).

Compassion fatigue and burnout: Prevalence among oncology nurses. *Clinical Journal of Oncology Nursing*, 14(5), E56-E62.

ProQOL.org. (2015, October, 15). Professional Quality of Life Elements Theory and Measurement. Retrieved from <http://www.proqol.org>.

Qualtrics (Version March, 2016) [Online computer software]. Provo, UT: Qualtrics. Retrieved from <https://www.qualtrics.com/>

Ray, S. L., Wong, C., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology*, 19(4), 255-267.

Riordan, R. J., & Kern, R. (1994). Shazam!!! You're a clinical supervisor. *The Family Journal*, 2(3), 259-261.

## A DYNAMIC SYSTEM

- Rossi, A., Cetrano, G., Pertile, R., Rabbi, L., Donisi, V., Grigoletti, L., & ... Amaddeo, F. (2012). Burnout, compassion fatigue, and compassion satisfaction among staff in community-based mental health services. *Psychiatry Research*, 200(2-3), 933-938.
- Ryan, E. P., Aaron, J., Burnette, M. L., Warren, J., Burket, R., & Aaron, T. (2008). Emotional responses of staff to assault in a pediatric state hospital. *Journal of the American Academy of Psychiatry and the Law*, 36(3), 360-368.
- Salloum, A., Kondrat, D. C., Johnco, C., & Olson, K. R. (2015). The role of self-care on compassion satisfaction, burnout and secondary trauma among child welfare workers. *Children and Youth Services Review*, 49, 54-61.
- Scheff, T. J. (2011). Social–emotional origins of violence: A theory of multiple killing. *Aggression and Violent Behavior*, 16(6), 453-460.
- Smart, D., English, A., James, J., Wilson, M., Daratha, K. B., Childers, B., & Magera, C. (2014). Compassion fatigue and satisfaction: A cross-sectional survey among US healthcare workers. *Nursing & Health Sciences*, 16(1), 3-10.
- Stamm, B. H. (2010). The concise ProQOL manual (2nd ed.). Pocatello, ID: ProQOL.org.
- Steckley, L. (2010). Containment and holding environments: Understanding and reducing physical restraint in residential child care. *Children & Youth Services Review*, 32(1), 120-128.
- Steckley, L., & Kendrick, A. (2008). Physical restraint in residential childcare: The experiences of young people and residential workers. *Childhood*, 15(4), 552-569.
- Thelen, E. & Smith, L. B. (1993). Dynamic Systems Theories. In *A dynamic systems approach to development*. Cambridge, MA: MIT Press.

## A DYNAMIC SYSTEM

- Thompson, I. A., Amatea, E. S., & Thompson, E. S. (2014). Personal and contextual predictors of mental health counselors' compassion fatigue and burnout. *Journal of Mental Health Counseling, 36*(1), 58-77.
- Vallacher, R. R., Van Geert, P., & Nowak, A. (2015). The intrinsic dynamics of psychological process. *Current Directions in Psychological Science, 24*(1), 58-64.
- Van Hook, M. P., & Rothenberg, M. (2009). Quality of life and compassion satisfaction/fatigue and burnout in child welfare workers: A study of the child welfare workers in community based care organizations in Central Florida. *Social Work & Christianity, 36*(1), 36-54.
- VanderVen, K. (1994). Preventing second-generation child abuse: Applying Chaos Theory to reframe interventions. *Child and Youth Care Administrator, 6*(1), 27-34.
- VanderVen, K. (1995). Point and level systems: Another way to fail children and youth. *Child & Youth Care Forum, 24*(6), 345-367.
- VanderVen, K. (2009). Why Focusing on control backfires: A systems perspective. *Reclaiming Children and Youth, 17*(4), 8-12.
- Wagaman, M. A., Geiger, J. M., Shockley, C., & Segal, E. A. (2015). The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. *Social Work, 60*(3), 201-209.
- Wells, J. B., Minor, K. I., Angel, E., Matz, A. K., & Amato, N. (2009). Predictors of job stress among staff in juvenile correctional facilities. *Criminal Justice and Behavior, 36*(3), 245-258.